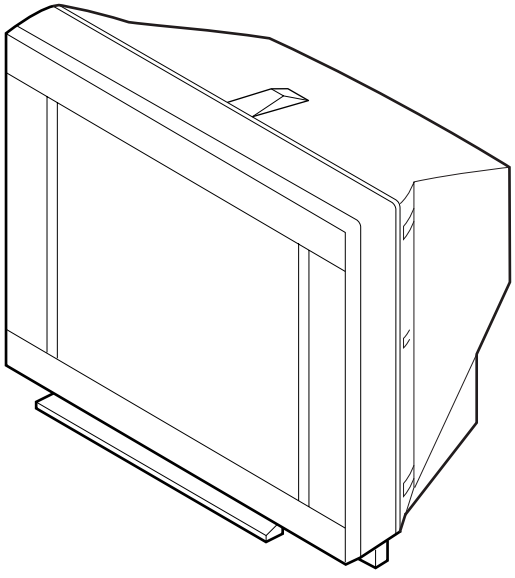
Self Diagnosis
Supported model

# SERVICE MANUAL

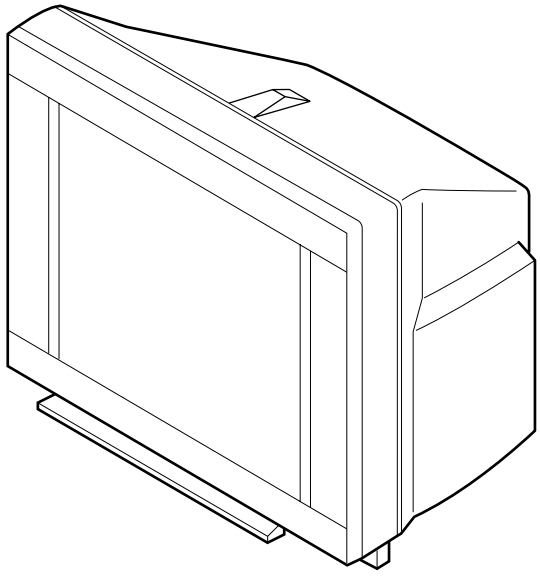
# BG-3R CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. |
|---|---|---|---|
| KV-XA29M31 | RM-954 | OCE | SCC-U44A-A |
| KV-XA29M61 | RM-954 | Malaysia | SCC-U45A-A |
| KV-XA29M50 | RM-954 | Malaysia | SCC-U45B-A |
| KV-XA34M31 | RM-954 | OCE | SCC-U44B-A |

| MODEL | COMMANDER | DEST. | CHASSIS NO. |
|---|---|---|---|



KV-XA34M31



KV-XA29M31/XA29M50/XA29M61

TRINITRON® COLOR TV

SONY®

## SPECIFICATIONS

| | | | Note |
|---|---|---|---|
| **Power requirements** | 220-240 V AC, 50/60 Hz | | |
| **Power consumption (W)** | Indicated on the rear of the TV | | |
| **Television system** | B/G, I, D/K, M | | |
| **Color system** | PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58 | | Except KV-XA29M50 |
| **Stereo/Bilingual system** | NICAM Stereo / Bilingual B/G, I; A2 Stereo Bilingual (German) B/G | | Except KV-XA29M50 |
| **Telerext Language** | English, Arabic, French | | Except KV-XA29M50 |
| **Channel coverage** | | | |
| **B/G** | VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41 | | |
| **I** | UHF: B21 to B68 / CATV: S01 to S03, S1 to S41 | | |
| **D/K** | VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60<br>CATV: S01 to S03, S1 to S41, Z1 to Z39 | | |
| **M** | VHF: A2 to A13 / UHF: A14 to A79 /<br>CATV: A-8 to A-2, A to W+4, W+6 to W+84 | | |
| **(Antenna)** | 75-ohm external terminal | | |
| **Audio output (Speaker)** | 8W + 8W | | 10% distortion |
| **Number of terminal** | | | |
| **(Video)** | Input: 4* Output: 1 | Phono jacks; 1 $V_{P-P}$, 75 ohms | * Three input lines available |
| **♪ (Audio)** | Input: 4* Output: 1 | Phono jacks; 500 mVrms | * Three input lines available |
| **(S Video)** | Input: 2 | Y : 1 Vp-p, 75 ohms, unbalanced, sync negative<br>C :0.286 Vp-p, 75 ohms | |
| **(Component Video)** | Input: 1 | Phono jacks<br>Y : 1 Vp-p, 75 ohms, sync negative<br>$C_B$ : 0.7 Vp-p, 75 ohms<br>$C_R$ : 0.7 Vp-p, 75 ohms<br>Audio : 500 mVrms | |
| **(Headphones)** | Output: 1 | minijack | |
| **Picture tube** | 29 inch | | Except KV-XA34M61 |
| | 34 inch | | KV-XA34M61 |
| **Tube size (cm)** | 72 | Measured diagonally | Except KV-XA34M61 |
| | 86 | Measured diagonally | KV-XA34M61 |
| **Screen size (cm)** | 68 | Measured diagonally | Except KV-XA34M61 |
| | 80 | Measured diagonally | KV-XA34M61 |
| **Dimension (w/h/d, mm)** | 722 x 576 x 516 | | Except KV-XA34M61 |
| | 895 x 674 x 590 | | KV-XA34M61 |
| **Mass (kg)** | 51 | | Except KV-XA34M61 |
| | 78 | | KV-XA34M61 |

Design and specifications are subject to change without notice.

**CAUTION**

**SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.**

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

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# SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

## 1. DIAGNOSTIC TEST INDICATORS

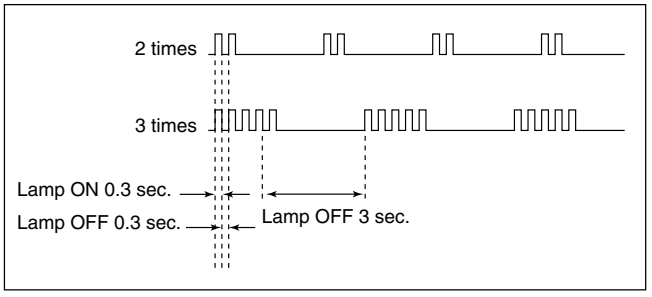
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

| Diagnostic Item Description | No. of times STANDBY/TIMER lamp flashes | Self-diagnostic display/Diagnostic result | Probable Cause Location | Detected Symptoms |
|---|---|---|---|---|
| • Power does not turn on | Does not light | — | • Power cord is not plugged in.<br>• Fuse is burned out F4601 (F) | • Power does not come on.<br>• No power is supplied to the TV.<br>• AC power supply is faulty. |
| • +B overcurrent (OCP) or overvoltage (OVP)<br>• Vertical deflection stopped<br>• Horizontal deflection overdrive | 2 times | 002:000 or<br>002:001~255<br>003:001~255<br>004:001~255<br>at the same time | • H.OUT Q511 is shorted. (A board)<br>• Q701, Q702, Q703 is shorted (C6 board)<br>• -13V is not supplied. (A board)<br>• IC 503 faulty (A board) | • Power does not come on.<br>• Load on power line is shorted.<br>• Has entered standby state after horizontal raster.<br>• Vertical deflection pulse is stopped.<br>• Power line is shorted or power supply is stopped. |
| • White balance failure (no PICTURE) | 5 times | 005:000 or<br>005:001~225 | • G2 is improperly adjusted. (Note 2)<br>• CRT problem.<br>• R(Q703), G(Q702) or B(Q701) out is faulty (C6 board)<br>• IC301 is faulty. (A board)<br>• No connection A board to C6 board. | • No raster is generated.<br>• CRT cathode current detection reference pulse output is small. |
| • Micro reset | — | 101:00 or<br>101:001~225 | • Discharge CRT (C6 Board)<br>• Static discharge<br>• External noise | • Power is shut down shortly, after this return back to normal.<br>• Detect Micro latch up. |

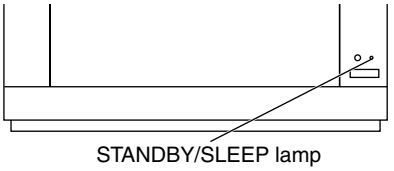
Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.
The symptom that is diagnosed first by the microcontroller is displayed on the screen.
Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.
* R(Q703), G(Q702) or B(Q701) out is faulty (C6 board).

## 2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT




| Diagnostic Item | Flash Count* |
|---|---|
| +B overcurrent/overvoltage<br>Vertical deflection stopped | 2 times |
| White balance failure | 5 times |

* One flash count is not used for self-diagnostic.




## 3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

## 4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

**[To Bring Up Screen Test]**

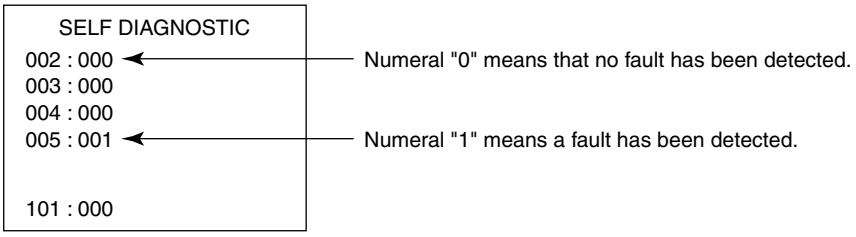
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON

⇧

Note that this differs from entering the service mode (mode volume +).

**Self-Diagnosis screen display**


SELF DIAGNOSTIC
002 : 000
003 : 000
004 : 000
005 : 001
101 : 000
Numeral "0" means that no fault has been detected.
Numeral "1" means a fault has been detected.

## 5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

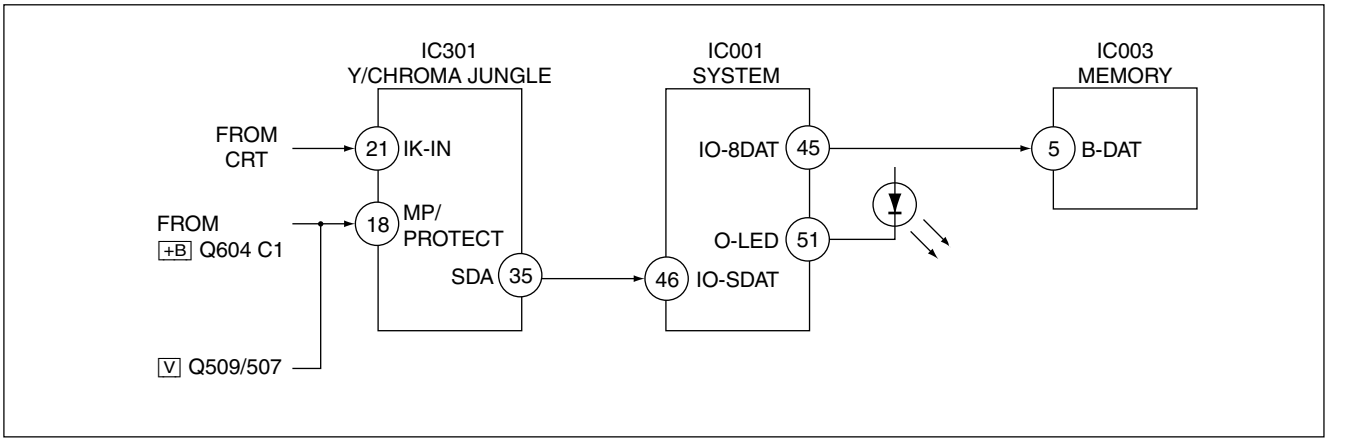
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

**[Clearing the result display]**
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel [8] ➡ 0

**[Quitting Self-diagnostic screen]**
To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

## 6. SELF-DIAGNOSTIC CIRCUIT



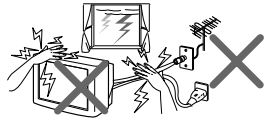

| | |
|---|---|
| +B overcurrent (OCP) | Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off. |
| Vertical deflection stopped | Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply. |
| Vertical deflection overcurrent | Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001. |
| White balance failure | If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture.<br><br>* (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.) |

**The operating instruction mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.**

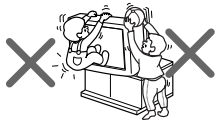
# SECTION 1
# GENERAL

## WARNING

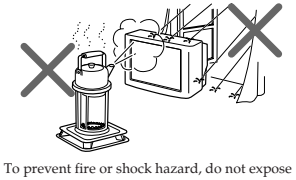
- Dangerously high voltages are present inside the TV.
- TV operating voltage: 220 – 240 V AC.



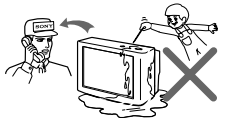
For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.



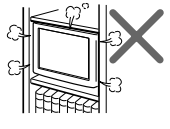
For children's safety, do not leave children alone with the TV. Do not allow children to climb onto it.



To prevent fire or shock hazard, do not expose the TV to rain or moisture.

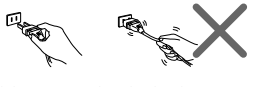


Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.

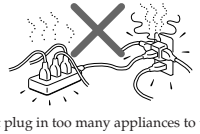


Do not block the ventilation openings of the TV. Do not install the TV in a confined space, such as a bookcase or built-in cabinet.

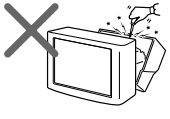
Clean the TV with a dry and soft cloth.
Do not use benzine, thinner, or any other chemicals to clean the TV. Do not scratch the picture tube.



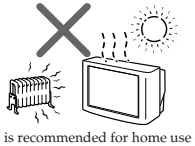
Pull the power cord out by the plug. Do not pull the power cord itself. Disconnect the TV before moving it or if you are not going to use it for several days.



Do not plug in too many appliances to the same power socket. Do not damage the power cord.



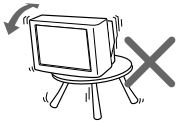
Do not open the cabinet and the rear cover of the TV as high voltages and other hazards are present inside the TV. Refer servicing and disposal of the TV to qualified personnel.



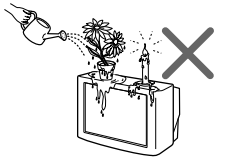
Your TV is recommended for home use only.
Do not use the TV in any vehicle or where it may be subject to excessive dust, heat, moisture or vibrations.



***WARNING (continued)***



Do not install the TV in an unstable position.
Use a proper TV stand.



Do not place any objects on the TV.

# Getting Started

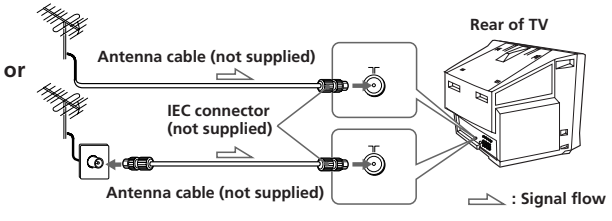
**CAUTION**

- Do not connect the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.
- To avoid battery leakage and damage to the remote, remove the batteries from the remote if you are not going to use it for several days. If any liquid that leaks from the batteries touches you, immediately wash it away with water.

## Step 1

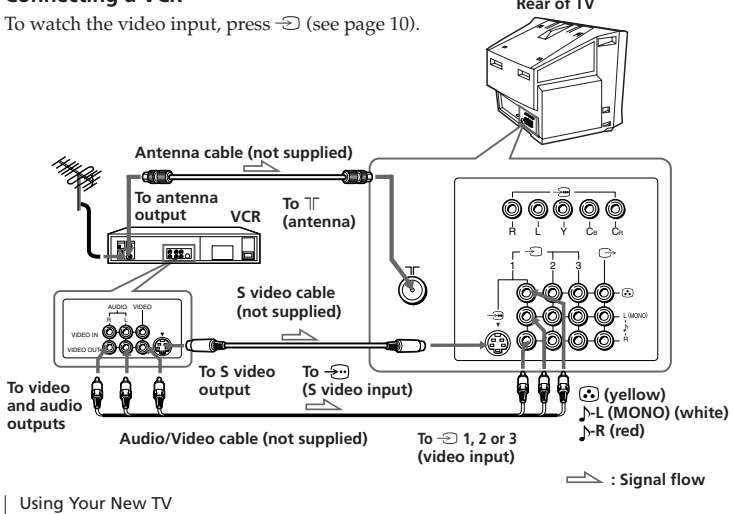
### Connect the antenna

If you wish to connect a VCR, see the "Connecting a VCR" diagram below.




### Connecting a VCR

To watch the video input, press ⮆ (see page 10).

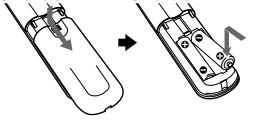



**Notes**

- If you connect a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to ♪-L (MONO) (the white jack).
- If you connect a VCR to the ⍑ (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- If both ⮆ (S video input) and ⮆ 1 (video input) at the rear of your TV are input at the same time, the ⮆ (S video input) is automatically selected. To view ⮆ 1 (video input), disconnect the S video cable.
- Do not connect video equipment to the ⮆ 3 (video input) jacks at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.
- When no signal is input to the connected video equipment, the TV screen becomes blue.

## Step 2

### Insert the batteries into the remote



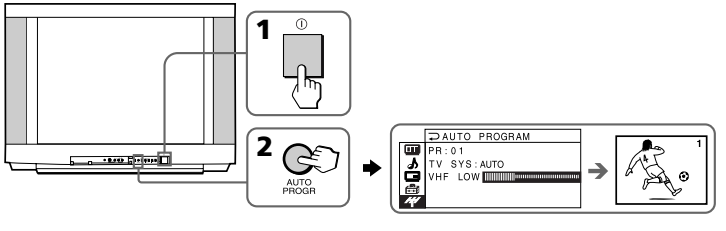
**Note**

- Do not use old batteries nor use different types of batteries together.

## Step 3

### Preset the channels automatically

**Front of TV**




**Tips**

- If you want to stop the automatic channel presetting, press MENU.
- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 28).

**Note (KV-XA29M50 only)**

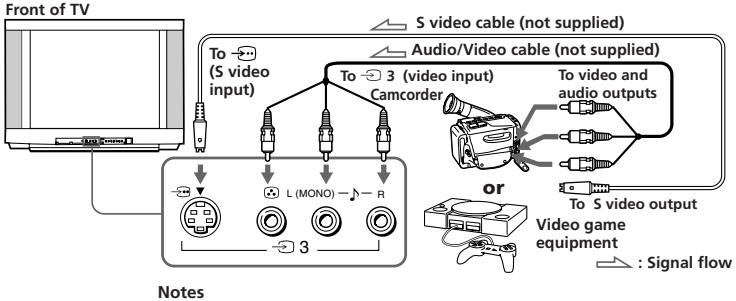
- During automatic channel presetting, your TV screen will indicate "B/G", "I", "D/K" or "M" for the TV system ("TV SYS").

# Connecting optional components

You can connect optional audio/video components, such as a VCR, multi disc player, DVD, camcorder, video game or stereo system.

To watch the picture of the connected equipment, press ⊜ (see page 11).

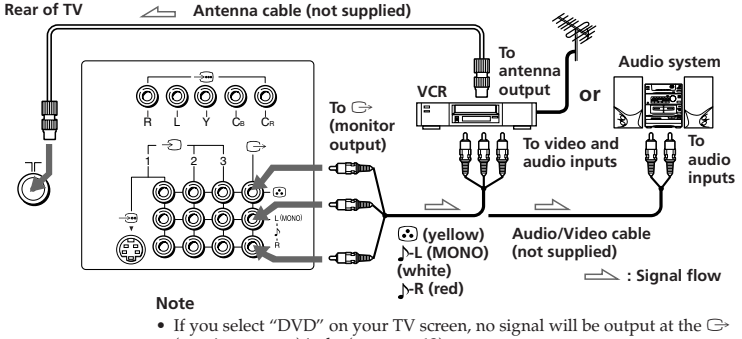
## Connecting a camcorder/video game equipment using the ⊜ (video input) jacks




**Notes**

- You can also connect video equipment to the ⊜ 1 or 2 (video input) jacks at the rear of your TV.
- If both ⊜ (S video input) and ⊜ 3 (video input) at the front of your TV are input at the same time, the ⊜ (S video input) is automatically selected. To view ⊜ 3 (video input), disconnect the S video cable.
- Do not connect video equipment to the ⊜ 3 (video input) jacks at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.

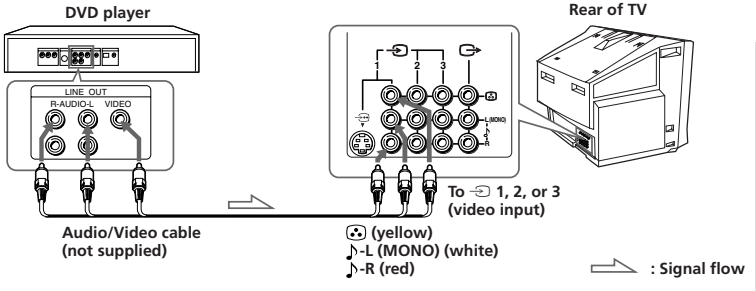
## Connecting audio/video equipment using the ⊃ (monitor output) jacks




**Note**

- If you select "DVD" on your TV screen, no signal will be output at the ⊃ (monitor output) jacks (see page 12).

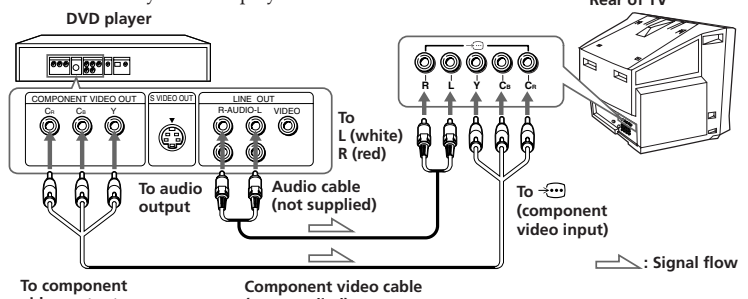
## Connecting a DVD player using the ⊜ (video input) jacks




## Connecting a DVD player using the ⊜ (component video input) jacks

1 Connect R and L under ⊜ (component video input) on your TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.

2 Using a component video cable, connect Y, $C_B$, and $C_R$ under ⊜ (component video input) on your TV to the COMPONENT VIDEO OUT Y, $C_B$, and $C_R$ output connectors on your DVD player.




**Notes**

- Some DVD player terminals may be labeled differently:

| Connect | To (on the DVD player) |
|---|---|
| Y (green) | Y |
| $C_B$ (blue) | $C_b$, B-Y or $P_B$ |
| $C_R$ (red) | $C_r$, R-Y or $P_R$ |

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the sharpness ("SHARP") in the "ADJUST" menu of the "PICTURE MODE" menu (see page 23).
- Connect your DVD player directly to your TV. Connecting the DVD player through other video equipment will cause unwanted picture noise.

continued





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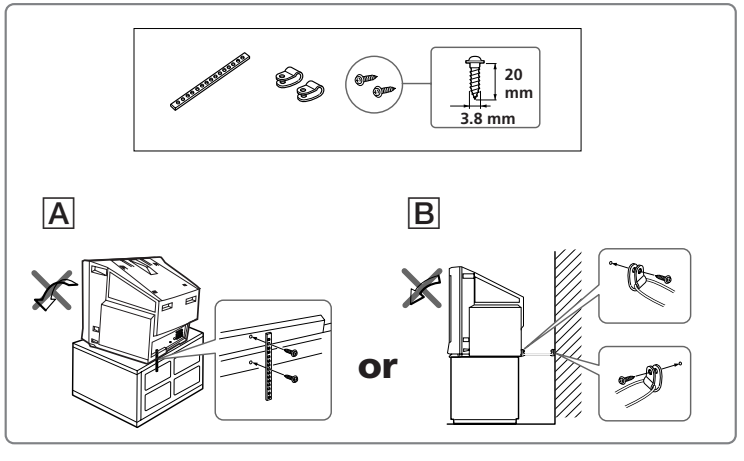
# Securing the TV

To prevent the TV from falling, secure the TV using one of the following methods:

A With the supplied screws, attach the band to the TV stand and to the rear of the TV using the provided hole.

**or**

B Put the cord or chain through the clamps to secure the TV against a wall or pillar.

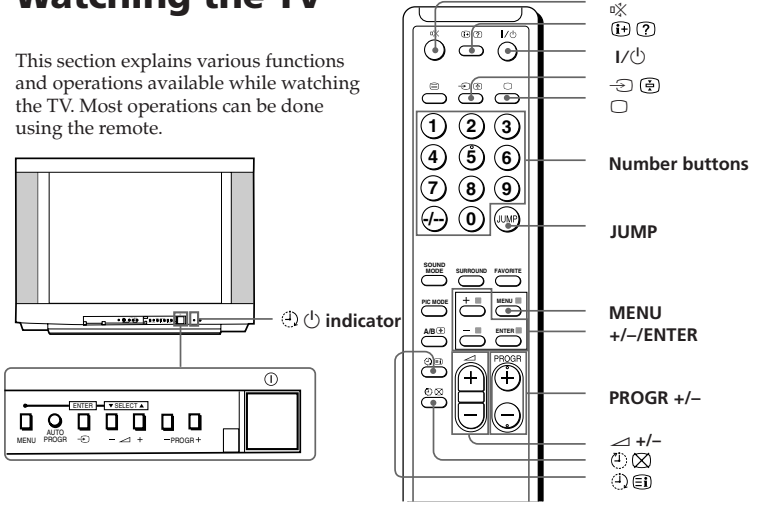



**Note**

- Use only the supplied screws. Use of other screws may damage the TV.

# Watching the TV

This section explains various functions and operations available while watching the TV. Most operations can be done using the remote.

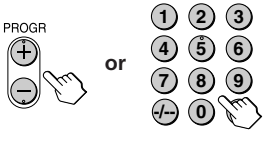



**1** Press ⏻ to turn on the TV.

When the TV is in the standby mode (the ⏻ indicator on the TV is lit red), press I/⏻ on the remote or PROGR +/– on the TV.

**2** Press PROGR +/– or number buttons to select the TV program.

For double digit numbers, press -/--, then the number (e.g., for 25, press -/--, then 2 and 5).




### To select a TV program quickly

(1) Press and hold PROGR +/–.
(2) Release PROGR +/– when the desired program number appears.

**Note**

- When you select a TV program quickly, the picture may be disrupted. This does not indicate a malfunction.

continued

## Additional tasks

| To | Do this |
|---|---|
| Turn off temporarily | Press I/⏻. The ⏻ indicator on the TV lights up red. |
| Turn off completely | Press ⏻ on the TV. |
| Adjust the volume | Press +/–. |
| Mute the sound | Press 🔇. |
| Watch the video input (VCR, camcorder, etc.) | Press ⏎ to select "VIDEO 1", "VIDEO 2" , "VIDEO 3" or "DVD". To return to the TV program, press 🖵 (or ⏎ on the TV). |
| Jump back to the previous channel | Press JUMP. |
| Display the on-screen information* | Press ⓘ. |

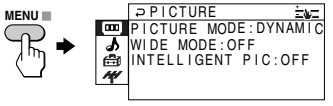
* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

## Changing the menu language

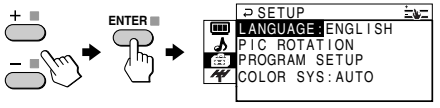
You can change the menu language as well as the on-screen language.

For details on how to use the menu, see **Introducing the menu system** on page 19.

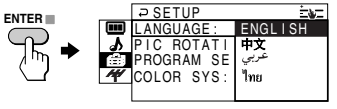
**1** Press MENU.



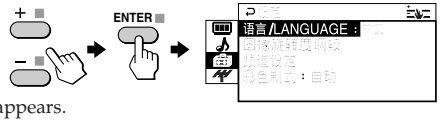

**2** Press + or – to select the "SET UP" icon (🧰), then press ENTER.




**3** Make sure "LANGUAGE" is selected, then press ENTER.




**4** Press + or – to select the desired language (e.g, "中文"), then press ENTER.




The selected menu language appears.

### To return to the normal screen

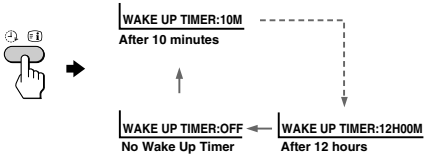
Press MENU.



## Setting the Wake Up timer

**1** Press ⏲ until the desired period of time appears.

The Wake Up timer starts immediately after you have set it.




**2** Select the TV program or video mode you want to display when you wake up.

**3** Press ⏻ or set the Sleep timer if you want the TV to turn off automatically.

The ⏲ indicator on the TV lights up orange.

### To cancel the Wake Up timer

Press ⏲ until "WAKE UP TIMER: OFF" appears or turn off the TV's main power.

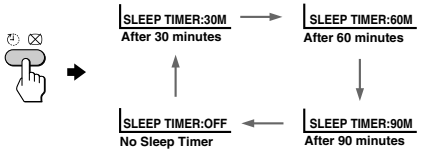
**Note**

- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into the standby mode. To continue watching the TV, press any button or control on the TV or the remote.

## Setting the Sleep timer

Press ⏲ until the desired period of time appears.

The Sleep timer starts immediately after you have set it.




### To cancel the Sleep timer

Press ⏲ until "SLEEP TIMER: OFF" appears or turn the TV off.







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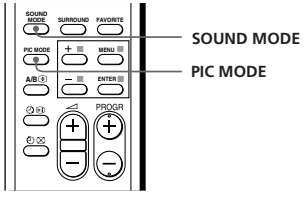
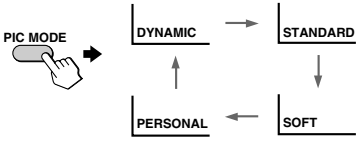
# Selecting the picture and sound modes




You can select picture and sound modes and adjust the setting to your preference in "PERSONAL" option.

## Selecting the picture mode

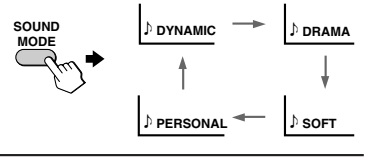
Press PIC MODE repeatedly until you get the desired picture mode.




| Select | To |
|---|---|
| "DYNAMIC" | receive high contrast pictures. |
| "STANDARD" | receive normal contrast pictures. |
| "SOFT" | receive mild pictures. |
| "PERSONAL" | receive the last adjusted picture setting from the "ADJUST" option in the "PICTURE" menu (see page 21). |

## Selecting the sound mode

Press SOUND MODE repeatedly until you get the desired sound mode.




| Select | To |
|---|---|
| "DYNAMIC" | listen to dynamic and clear sound that emphasizes the low and high tones. |
| "DRAMA" | listen to sound that emphasizes voice and high tones. |
| "SOFT" | receive soft sound. |
| "PERSONAL" | receive the last adjusted sound setting from the "ADJUST" option in the "SOUND" menu (see page 23). |

**Tip**

- You can also set the picture and sound modes using the menu (see **Changing the "PICTURE" setting** on page 21 and **Changing the "SOUND" setting** on page 23).

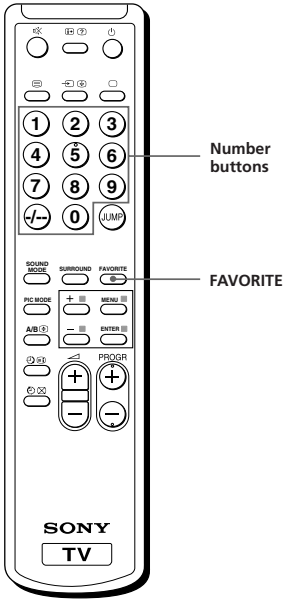




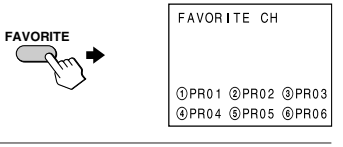


# Viewing your favorite channels

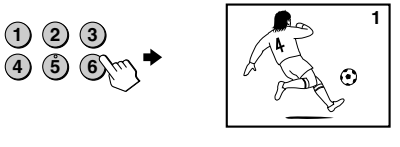
You can display and select six of your favorite channels directly from your TV screen.




**1** Press FAVORITE.




**2** Press the number button from 1 to 6 to select the desired channel.

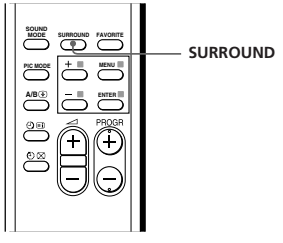



**Tip**

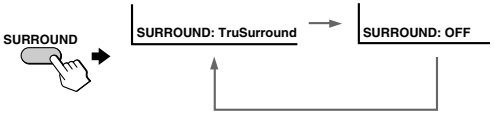
- To program your favorite channels, see **"Adjusting each channel settings (PROGRAM SETUP)"** on page 26.

# Listening with surround sound

The surround feature enables you to enjoy the sound effects of a concert hall or movie theater.




Press SURROUND repeatedly until you receive the desired surround sound.




| Select | To |
|---|---|
| "TruSurround" | listen to the surround sound that spreads out to the rear of a room. |
| "OFF" | turn off the surround sound. |

**Tip**

- You can also select the surround option using the menu (see **Changing the "SOUND" setting** on page 24).

The surround of your TV is categorized as TruSurround.

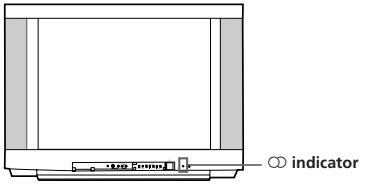
**TruSurround**™ is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents.

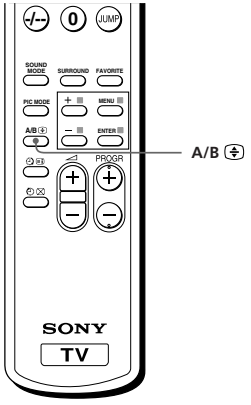


# Enjoying stereo or bilingual programs

**(KV-XA29M31/XA29M61/XA34M31)**

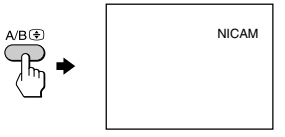
You can enjoy stereo sound or bilingual programs of NICAM and A2 stereo systems.




Press A/B repeatedly until you receive the sound you want.

The on-screen display changes to show the selected sound. The indicator on the TV lights up red when receiving any stereo or bilingual program.




### When receiving a NICAM program

| Broadcasting | On-screen display (Selected sound) |
|---|---|
| NICAM stereo | NICAM (Stereo sound) → MONO (Regular sound) |
| NICAM bilingual | NICAM MAIN (Main sound) → NICAM SUB (Sub sound) → MONO (Regular sound) |
| NICAM monaural | NICAM MAIN (Main sound) → MONO (Regular sound) |

continued

### *Enjoying stereo or bilingual programs (continued)*

#### When receiving an A2 program

| Broadcasting | On-screen display (Selected sound) |
|---|---|
| A2 stereo | MONO (Regular sound) → STEREO (Stereo sound) |
| A2 bilingual | MAIN (Main sound) → SUB (Sub sound) |

#### Receiving area for NICAM and A2 programs

| System | Receiving area |
|---|---|
| NICAM | Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc. |
| A2 | Australia, Malaysia, Thailand, etc. |

**Notes**

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select "MONO". The sound becomes monaural, but the noise is reduced.

#### If the sound is distorted when receiving a monaural program through the ⅂ (antenna) terminal

Press A/B repeatedly until "MONO" appears on the screen.

To cancel the monaural sound setting, press A/B again until "AUTO" appears on the screen.

MONO → AUTO

**Notes**

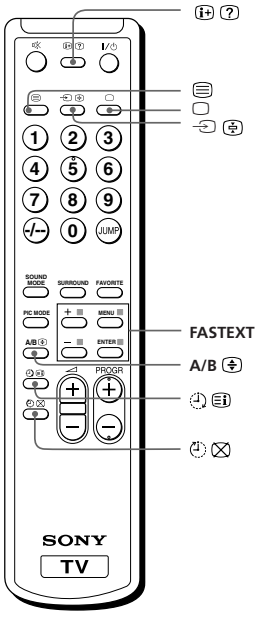
- The "MONO" or "AUTO" setting is memorized for each program position.
- You cannot receive stereo broadcast signal when the TV is in the "MONO" setting. Normally set the TV to "AUTO".



# Viewing Teletext

**(KV-XA29M31/XA29M61/XA34M31)**

TV stations broadcast an information service called Teletext via some TV channels. Teletext allows you to receive various information, such as shares market or news.

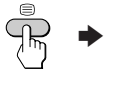


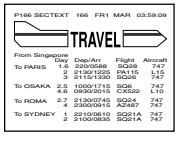

## Displaying Teletext

**1** Select a TV channel that carries the Teletext broadcast you want to watch.

**2** Press ☰ to display the text.

A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, "100" is displayed at the top left corner of the screen.






### To turn off Teletext

Press ▭.

continued

## Additional Teletext tasks

| To | Do this |
|---|---|
| display a Teletext page on the TV picture | Press ☰.<br>Each time you press ☰, the screen changes as follows: Teletext → Teletext and TV → TV. |
| check the contents of a Teletext service | Press ⓘ.<br>An overview of the Teletext contents and page numbers appear on the screen. |
| select a Teletext page | Press the number buttons to enter the three-digit page number of the desired Teletext page.* If you make a mistake, reenter the correct page number. To access the next or previous page, press PROGR +/–. |
| hold a Teletext display | Press ⊜ to display the symbol "⊜" at the top left corner of the screen. To resume normal Teletext operation, press ⊜ or ☰. |
| reveal concealed information (e.g., an answer to a quiz) | Press ?.<br>To conceal the information, press the button again. |
| enlarge the Teletext display | Press ⇳.<br>Each time you press ⇳, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size. |
| wait for a Teletext page while watching a TV program | 1 Enter the Teletext page number that you want to refer to, then press ⊠.<br>2 When the page number is displayed, press ☰ to show the text. |

* You can also select a Teletext page that appears in the colored columns at the bottom of the screen using the corresponding color-coded buttons on the remote.

## Using FASTEXT

This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcasted, the colored menus appear at the bottom of the screen. The colors of the menus correspond to the red, green, yellow, and blue color-coded buttons on the remote.

### To access a FASTEXT menu

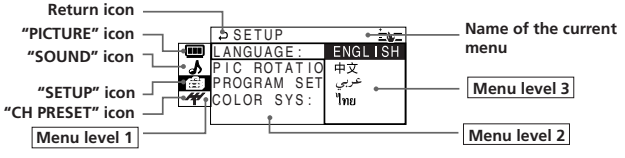
Press the color-coded button on the remote corresponding to the menu you want. The menu page appears on the screen after several seconds.





# Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. Here's an overview of the menu system.




| Level 1 | Level 2 | Level 3/Function |
|---|---|---|
| "PICTURE" | "PICTURE MODE" | Select the "PICTURE" mode:<br>"DYNAMIC"→ "STANDARD"→ "SOFT"→ "PERSONAL"→ "ADJUST" |
| | "ADJUST" | Adjust the "PERSONAL" option:<br>"PICTURE" → "COLOR"→ "BRIGHT"→ "HUE"→ "SHARP" |
| | "WIDE MODE" | Change the picture size. |
| | "INTELLIGENT PIC" | Optimize picture quality. |
| "SOUND" | "SOUND MODE" | Select the "SOUND" mode:<br>"DYNAMIC"→ "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST" |
| | "ADJUST" | Adjust the "PERSONAL" option:<br>"BASS" → "TREBLE"→ "BALANCE"→ "BBE"* |
| | "SURROUND" | Select the "SURROUND" mode:<br>"TruSurround" → "OFF" |
| | "INTELLIGENT VOL" | Adjust volume automatically. |
| "SETUP" | "LANGUAGE" | Change the menu language:<br>"ENGLISH" →"中文"(Chinese) → "عربي"(Arabic) → "ไทย" (Thai) |
| | "PIC ROTATION" | Rotate the picture. |
| | "PROGRAM SETUP" | Adjust each channel settings. |
| | "COLOR SYS" | Change the color system:<br>"AUTO" → "PAL" → "SECAM" → "NTSC3.58" → "NTSC4.43" |
| "CH PRESET" | "AUTO PROGRAM" | Preset channels automatically. |
| | "MANUAL PROGRAM" | Preset channels manually. |
| | "TV SYS" | Change the TV system:<br>"B/G" → "I" → "D/K" → "M" |

* The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

continued





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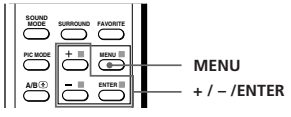
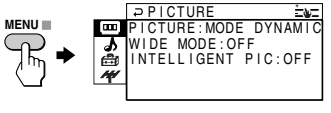
*Introducing the menu system (continued)*

## How to use the menu

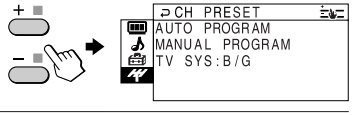
You can use the buttons on the remote and on the TV as well to display the menu and adjust the settings.



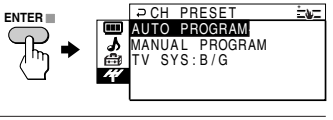

**1** Press MENU to display the menu.




**2** Press + or – to select the desired item.




**3** Press ENTER to confirm your selection and go to the next menu level.



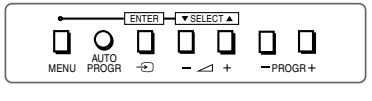

### Other menu operations

| To | Press |
|---|---|
| Adjust the setting value | +/– |
| Return to the previous menu level | ENTER |
| Cancel the menu | MENU |

**Tips**

- To return from Menu Level 2 to MENU Level 1, press +/– to select the return icon ( ⮌ ), then press ENTER.
- Some of the menu items can be operated directly using the remote buttons.
- The MENU, ENTER, and SELECT ▼/▲ buttons on the TV can also be used for the operations above.

**Front of TV**




**Note**

- If more than 60 seconds elapse between entries, the menu screen automatically disappears.

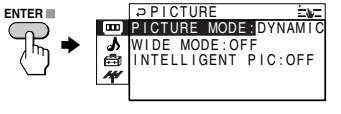


# Changing the "PICTURE" setting

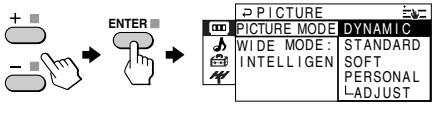
The "PICTURE" menu allows you to change the picture settings.

**1** Press MENU.

**2** Make sure the "PICTURE" icon ( ▭ ) is selected, then press ENTER.




**3** Press + or – to select the desired item (e.g., "PICTURE MODE"), then press ENTER.




| Select | To |
|---|---|
| "PICTURE MODE" | choose either "DYNAMIC", "STANDARD", "SOFT" "PERSONAL"*, or "ADJUST". |
| "WIDE MODE" | change the picture size when receiving wide-mode (16:9) picture signal.<br>Press + or – to select "ON", then press ENTER.<br>To cancel, select "OFF", then press ENTER. |
| "INTELLIGENT PIC" | optimize picture quality.<br>Press + or – to select "ON", then press ENTER.<br>To cancel, select "OFF", then press ENTER. |

* When the "PERSONAL" mode is selected, you can receive the last adjusted picture settings from the "ADJUST" option (see page 22).

**Note**

- For details on the options under "PICTURE MODE", see page 12.

### To return to the normal screen

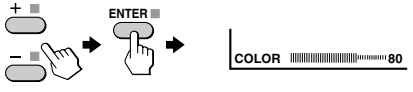
Press MENU.

continued

*Changing the "PICTURE setting" (continued)*

## Adjusting the "ADJUST" items under "PICTURE MODE"

**1** Press + or – to select the desired item (e.g., "COLOR"), then press ENTER.




**2** Adjust the value according to the following table, then press ENTER.

| For | Press – to | Press + to |
|---|---|---|
| "PICTURE" | decrease picture contrast | increase picture contrast |
| "COLOR" | decrease color intensity | increase color intensity |
| "BRIGHT" | darken the picture | brighten the picture |
| "HUE"* | increase red picture tones | increase green picture tones |
| "SHARP" | soften the picture | sharpen the picture |

* You can adjust "HUE" for the NTSC color system only.

**3** Repeat the above steps to adjust other items.

The adjusted settings will be received when you select "PERSONAL".

**Tip**

- For details on the menu system and how to use the menu, refer to **Introducing the menu system** on page 19.

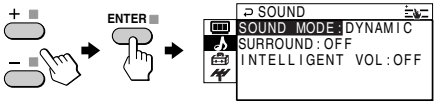


# Changing the "SOUND" setting

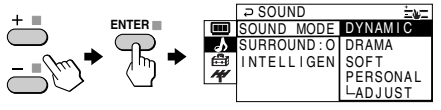
The "SOUND" menu allows you to change the sound settings.

**1** Press MENU.

**2** Press + or – to select the "SOUND" icon (♪), then press ENTER.




**3** Press + or – to select the desired item (e.g., "SOUND MODE"), then press ENTER.




| Select | To |
|---|---|
| "SOUND MODE" | choose either "DYNAMIC", "DRAMA", "SOFT", "PERSONAL"*, or "ADJUST". |
| "SURROUND" | choose either "TruSurround" or "OFF". |
| "INTELLIGENT VOL" | adjust the volume of all TV programs and video inputs automatically.<br>Press + or – to select "ON", then press ENTER.<br>To cancel, select "OFF", then press ENTER. |

* When the "PERSONAL" mode is selected, you can receive the last adjusted sound settings from the "ADJUST" option (see page 24).

**Tip**

- For details on the options under "SOUND MODE" and "SURROUND", see pages 12 and 14 respectively.

## To return to the normal screen

Press MENU.

continued



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*Changing the sound setting (continued)*

### Adjusting the "ADJUST" items under "SOUND MODE"

**1** Press + or – to select the desired item (e.g., "BALANCE"), then press ENTER.

**2** Adjust the value according to the following table, then press ENTER.

| For | Press – to | Press + to |
|---|---|---|
| "BASS" | decrease the bass | increase the bass |
| "TREBLE" | decrease the treble | increase the treble |
| "BALANCE" | increase the left speaker's volume | increase the right speaker's volume |
| "BBE" | select "HIGH" for higher enhancement of sound clarity;<br>select "LOW" for lower enhancement of sound clarity;<br>select "OFF" to turn off the BBE sound | |

**3** Repeat the above steps to adjust other items.

The adjusted settings will be received when you select "PERSONAL".

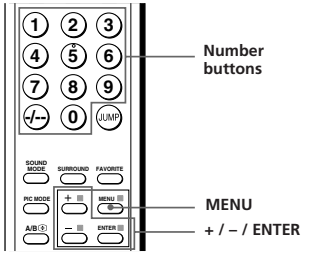
**Tip**

- For details on the menu system and how to use the menu, refer to **Introducing the menu system** on page 19.



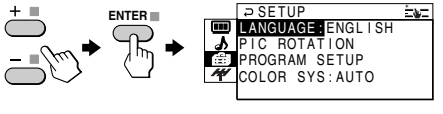
# Changing the "SETUP" setting

The "SETUP" menu allows you to change the menu language, adjust the picture position, setup your program and select color system.

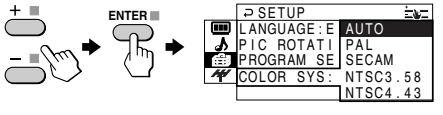



**1** Press MENU.

**2** Press + or – to select "SETUP" icon ( ), then press ENTER.




**3** Press + or – to select the desired item (e.g., "COLOR SYS"), then press ENTER.




| Select | To |
|---|---|
| "LANGUAGE" | change the menu language (see **Changing the menu language** on page 10). |
| "PIC ROTATION" | adjust the picture position when it is not aligned to the TV screen. Press + or – to adjust the picture position, then press ENTER. |
| "PROGRAM SETUP" | adjust each channel settings (see **Adjusting each channel settings (PROGRAM SETUP)** on page 26). |
| "COLOR SYS" | change the color system. Normally, set this to "AUTO". |

### To return to the normal screen

Press MENU.

continued

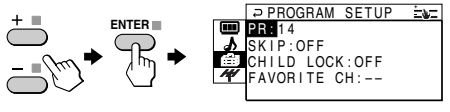
*Changing the "SETUP" setting (continued)*

## Adjusting each channel settings (PROGRAM SETUP)

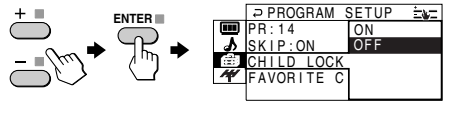
The "PROGRAM SETUP" menu allows you to change the program settings.

**1** Select "PROGRAM SETUP" from the "SETUP" menu.

**2** Select "PR" and press ENTER. Press + or – to select the desired channel you want to adjust, then press ENTER.




**3** Press + or – to select the desired item (e.g., "CHILD LOCK"), then press ENTER.




| Select | To |
|---|---|
| "PR" | select the desired channel. |
| "SKIP" | skip unwanted or unused program number.<br>Press + or – to select "ON", then press ENTER.<br>To cancel, select "OFF", then press ENTER. |
| "CHILD LOCK" | prevent children from watching this selected channel.<br>Press + or – to select "ON", then press ENTER.<br>The lock symbol ( 🔒 ) appears on the screen.<br>To cancel, select "OFF", then press ENTER.<br>If you preset a locked channel, that particular channel will be unlocked automatically. |
| "FAVORITE CH" | program channels for direct selection.<br>Press + or – to select one of the six favorite channel numbers (if you decide not to make any changes, select " ↩ "), then press ENTER.<br>To view the selected favorite channel, refer page 13. |

**4** To continue adjusting other channels, press + or – to select "PR", then repeat step 2 and 3.

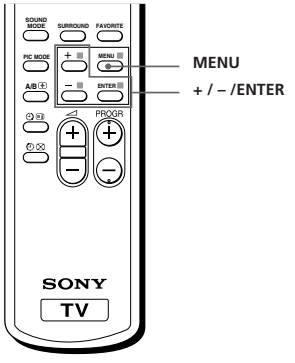
### To return to the normal screen

Press MENU.



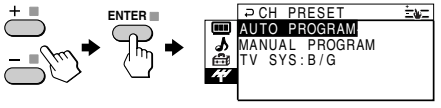
# Changing the Channel Preset ("CH PRESET") setting

The "CH PRESET" menu allows you to adjust the setup of your TV. For example, you can receive a channel with a weak signal that fails to be tuned in by automatic presetting.

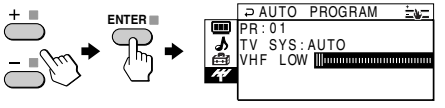



**1** Press MENU.

**2** Press + or – to select the "CH PRESET" icon ( ), then press ENTER.




**3** Press + or – to select the desired item (e.g., "AUTO PROGRAM"), then press ENTER.




| Select | To |
|---|---|
| AUTO PROGRAM | preset channels automatically. |
| MANUAL PROGRAM | preset channels manually (see **Presetting channels manually** on page 28). |
| TV SYS | change the TV system.<br>Press + or – to select either "B/G", "I", "D/K" or "M", then press ENTER. |

### To return to the normal screen

Press MENU.

**Tip**

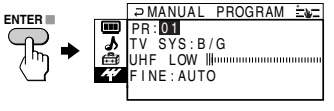
- For details on the menu system and how to use the menu, refer to Introducing the menu system on page 21.

continued

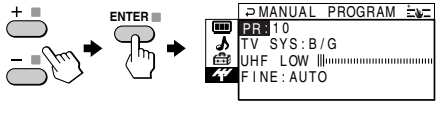
## Presetting channels manually

**1** After selecting "MANUAL PROGRAM", select the program number to which you want to preset a channel.

(1) Make sure "PR" is selected , then press ENTER.

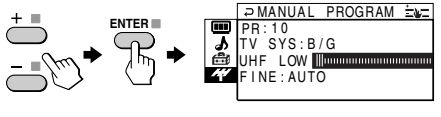



(2) Press + or – until the program number you want to preset (e.g., program number "10") appears on the menu, then press ENTER.

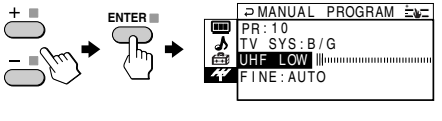



**2** Select the desired channel.

(1) Press + or – to select either "VHF LOW", "VHF HIGH" or "UHF", then press ENTER.

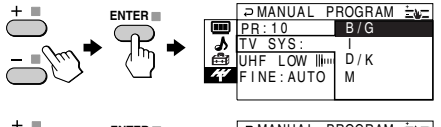



(2) Press + or – until the desired channel picture appears on the TV screen, then press ENTER.

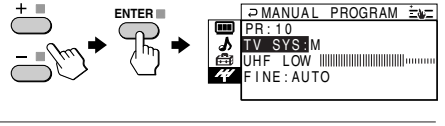



**3** If the sound of the desired channel is abnormal, select the appropriate TV system.

(1) Press + or – to select "TV SYS", then press ENTER.

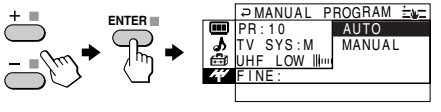



(2) Press + or – until the sound becomes normal (e.g., "M"), then press ENTER.

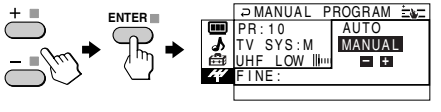



**4** If you are not satisfied with the picture and sound quality, you may improve them by using fine tuning.

(1) Press + or – to select "FINE", then press ENTER.

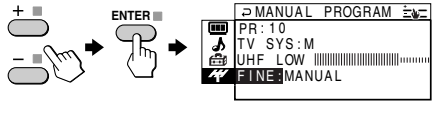



(2) Press + or – to select "MANUAL", then press ENTER.




(3) Press + or – until the picture and sound quality are optimal, then press ENTER.

The + or – icon on the menu flashes while tuning.




### To return to the normal screen

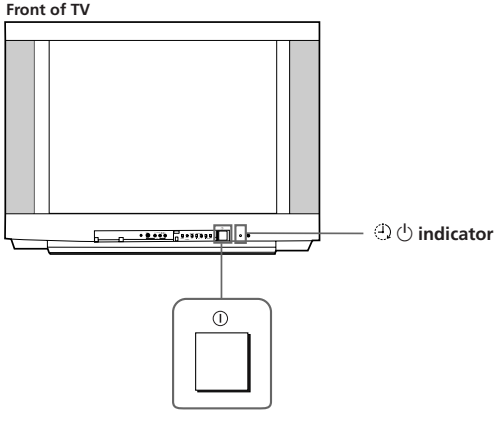
Press MENU.

**Notes**

- If you preset a locked channel ("CHILD LOCK"), that particular channel will be unlocked automatically (see page 26).
- The TV system ("TV SYS") and the fine tuning ("FINE") settings are memorized for each program number.

# Self-diagnosis function

Your TV is equipped with a self-diagnosis function. If there is a problem with your TV, the ⏻ indicator flashes red. The number of times the ⏻ indicator flashes indicates the possible causes.




**1** Check that the ⏻ indicator flashes red a number of times between 3-second intervals.

**2** Count the number of times the ⏻ indicator flashes.

**3** Press ⏽ (main power) to turn off your TV.

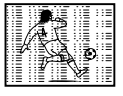
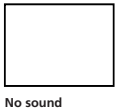
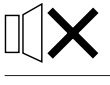
**4** Inform your nearest Sony service center about the number of times the ⏻ indicator flashes.
Be sure to note the model name and serial number located on the rear of your TV.





# Troubleshooting

If you find any problem while viewing your TV, please check the following guide. If any problem persists, contact your Sony dealer .

| Symptom | Possible cause | Solutions | Page |
|---|---|---|---|
| Snowy picture  | • Connection is loose or the cable is damaged. | • Check the antenna cable and connection on the TV, VCR and on the wall. | 4 |
| | • Channel presetting is inappropriate or incomplete. | • Display the “CH PRESET” menu and select “MANUAL PROGRAM” to preset the channel again. | 28 |
| Noisy sound | • The antenna type is inappropriate. | • Check the antenna type (“VHF”/“UHF”). Contact a Sony dealer for advice. | – |
| | • The antenna direction is inappropriate. | • Adjust the antenna direction. Contact a Sony dealer for advice. | – |
| | • Signal transmission is low. | • Try using a booster. | – |
| Distorted picture | • Broadcast signals are too strong. | • Turn off or disconnect the booster if it is in use. | – |
| Noisy sound | | | |
| Good picture | • The TV system setting or channel presetting is inappropriate or incomplete. | • If the sound of all the channels are noisy, display the “CH PRESET” menu and check the TV system (“TV SYS”) setting, then select “AUTO PROGRAM” to preset the channels again. | 27 |
| Noisy sound | | • If the sound of some channels are noisy, select the channel, then display the “CH PRESET” menu and select the appropriate TV system (“TV SYS”). | 27 |
| No picture  | • The power cord, antenna or VCR is not connected. | • Check the power cord, antenna and the VCR connections. | 4 |
| | • The TV is not turned on. | • Press I/⏻ (power). | 9 |
| No sound  | | • Press ⏽ (main power) on the TV to turn off the TV for about five seconds, then turn it on again. | 9 |

continued





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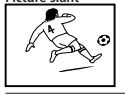
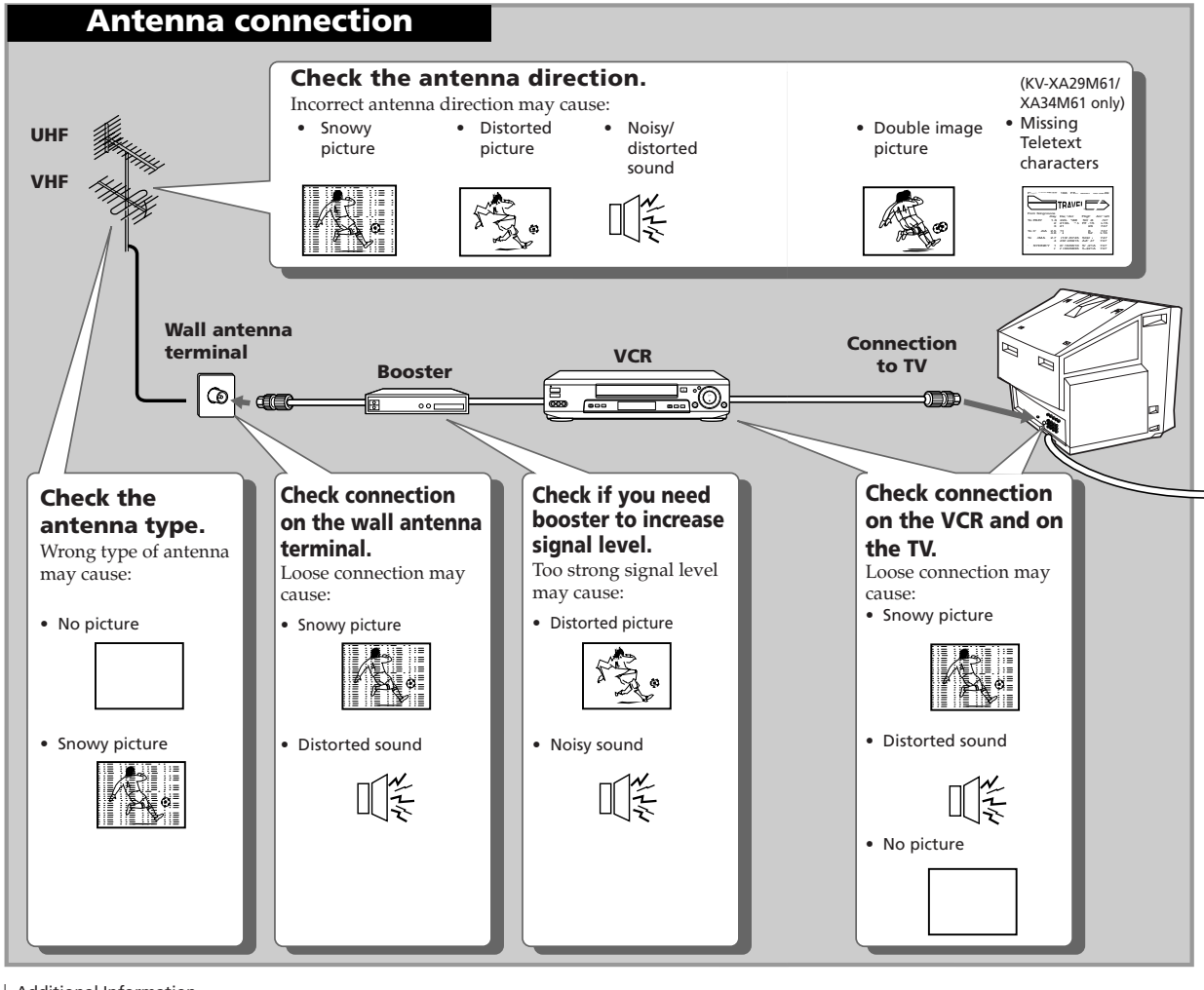
## *Troubleshooting (continued)*

| Symptom | Possible cause | Solutions | Page |
|---|---|---|---|
| **Good picture**<br> | • The volume level is too low. | • Press + to increase the volume level. | 10 |
| | • The sound is muted. | • Press to cancel the muting. | 10 |
| **No sound**<br> | • Broadcast signal has a transmission problem. | • Press A/B until a good sound is heard. (KV-XA29M31/XA29M61/XA34M31 only) | 15 |
| **Dotted lines or stripes**<br> | • There is local interference from cars, neon signs, hair dryers, power generators, etc. | • Do not use a hair dryer or other equipment near the TV.<br>• Adjust the antenna direction for minimum interference. Contact a Sony dealer for advice. | –<br>– |
| **Double images or "ghosts"**<br> | • Broadcast signals are reflected by nearby mountains or buildings. | • Use a highly directional antenna.<br>• Use the fine tuning ("FINE") function. | –<br>29 |
| | • The antenna direction is inappropriate. | • Adjust the antenna direction. Contact a Sony dealer for advice. | – |
| | • Use of a booster is inappropriate. | • Turn off or disconnect the booster if it is in use. | – |
| **No color**<br> | • The color level setting is too low. | • Display the "PICTURE" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level. | 22 |
| | • The color system setting is inappropriate. | • Display the "SETUP" menu and check the color system ("COLOR SYS") setting (usually set this to "AUTO"). | 25 |
| | • The antenna direction is inappropriate. | • Adjust the antenna direction. Contact a Sony dealer for advice. | – |
| **Abnormal color patches**<br> | • The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV. | • Keep external speakers or other electrical equipment away from the TV. Do not move the TV while the TV is turned on. Press ⏻ (main power) on the TV to turn off the TV for about five minutes, then turn it on again. | – |
| **TV cannot receive stereo broadcast signal. (KV-XA29M31/XA29M61/XA34M31)** | • The stereo reception setting is inappropriate. | • Press A/B until "AUTO" appears on the screen. | 15 |

| Symptom | Possible cause | Solutions | Page |
|---|---|---|---|
| **Stereo broadcast sound switches on and off or is distorted.**<br>**or**<br>**The sound switches between monaural and stereo frequently. (KV-XA29M31/XA29M61/XA34M31)** | • Connection is loose or the cable is damaged. | • Check the antenna cable and connection on the TV, VCR and on the wall. | 4 |
| | • The antenna direction is inappropriate. | • Adjust the antenna direction. Contact a Sony dealer for advice. | – |
| | • Broadcast signal has a transmission problem. | • Press A/B until a good sound is heard. | 15 |
| **"100" appears on the top of the screen and no Teletext display. (KV-XA29M31/XA29M61/XA34M31)** | • The channel carries no Teletext broadcast. | — | 17 |
| **Teletext display is incomplete (picture snowy or double images). (KV-XA29M31/XA29M61/XA34M31)** | • Connection is loose or the cable is damaged. | • Check the antenna cable and connection on the TV, VCR and on the wall. | 4 |
| | • The antenna direction is inappropriate. | • Adjust the antenna direction. Contact a Sony dealer for advice. | – |
| | • Signal transmission is too low. | • Try using a booster. | – |
| **Picture slant**<br>  | • The terrestrial magnetism affects your TV set. | • Display the "SETUP" menu and adjust "PIC ROTATION" so that the picture is aligned to the TV screen. | 25 |
| **Lines moving across the TV screen.** | • There is interference from external sources, e.g., heavy machineries, nearby broadcast station. | • Use the fine tuning ("FINE") function. | 29 |
| **The ⏻ indicator on your TV flashes red a number of times between 3-second intervals.** | • Your TV may need service. | • Contact your nearest Sony service center. | 30 |
| **TV cabinet creaks.** | • Changes in room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction. | — | – |
| **A "boom" sound is heard when the TV is turned on.** | • The TV's demagnetizing function is working. This does not indicate a malfunction. | — | – |

# Troubleshooting Shortcuts

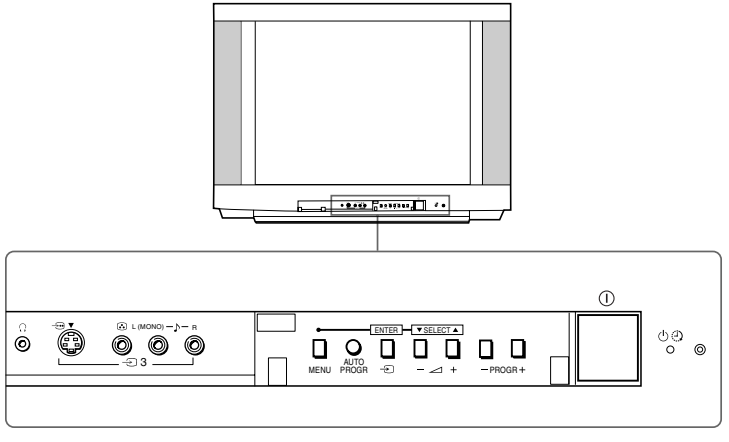
For better viewing, please check the following connections.




For more information, see **Troubleshooting** on page 31 or consult your dealer for guidance.

# Overview of controls

## TV front panel



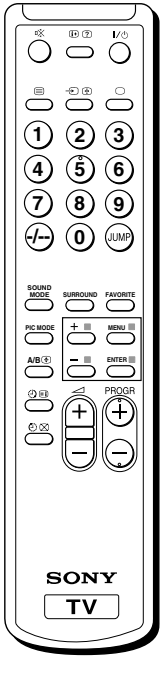

| Button | Function | Page |
|---|---|---|
| AUTO PROGR | Preset channels automatically. | 5 |
| ⏻ | Turn off completely or turn on the TV. | 9 |
| PROGR +/– | Select program number. | 9 |
| ⏻ | Standby indicator | 9 |
| +/– | Adjust volume. | 10 |
| | Select TV or video input. | 10 |
| | Wake Up indicator | 11 |
| | Stereo/Bilingual indicator. | 15 |
| MENU | Display the menu. | 20 |
| | Headphones jack. | – |







## Remote control



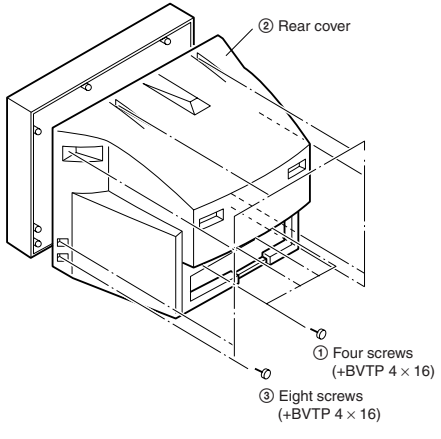

Names/symbols of buttons on the remote are indicated in different colors to represent the available functions.

| Label color | Button function |
|---|---|
| White | For general TV operations |
| Green | For Teletext operations |

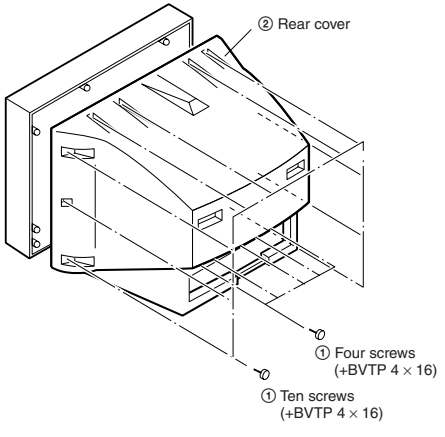
| Button | Function | Page |
|---|---|---|
| I/⏻ | Turn off temporarily or turn on the TV. | 9 |
| PROGR +/– | Select program number. | 9 |
| 0 – 9, -/-- | Input numbers. | 9 |
| +/– | Adjust volume. | 9 |
| | Select TV or video input. | 10 |
| | Display the TV program. | 10 |
| | Mute the sound. | 10 |
| | Display on-screen information. | 10 |
| JUMP | Jump to previous channel. | 10 |
| Timer operations | | |
| | Set TV to turn on automatically. | 11 |
| | Set TV to turn off automatically. | 11 |
| PIC MODE | Select picture mode. | 12 |
| SOUND MODE | Select sound mode. | 12 |
| FAVORITE | Display favorite channels. | 13 |
| SURROUND | Select surround mode. | 14 |
| Stereo/bilingual operations (KV-XA29M61/XA34M61 only) | | |
| A/B | Select stereo/bilingual mode. | 15 |
| Teletext operations (KV-XA29M61/XA34M61 only) | | |
| | Display Teletext broadcast. | 17 |
| | Enlarge the Teletext display. | 18 |
| | Reveal concealed information. | 18 |
| | Stop Teletext display from scrolling. | 18 |
| | Display Teletext service contents. | 18 |
| | Show TV screen while waiting for Teletext page. | 18 |
| ■ (red, green, yellow, blue) | Access a Fastext menu | 18 |
| Menu operations | | |
| MENU | Display the menu. | 20 |
| + or – | Select and adjust item. | 20 |
| ENTER | Confirm selected item. | 20 |

# SECTION 2
# DISASSEMBLY

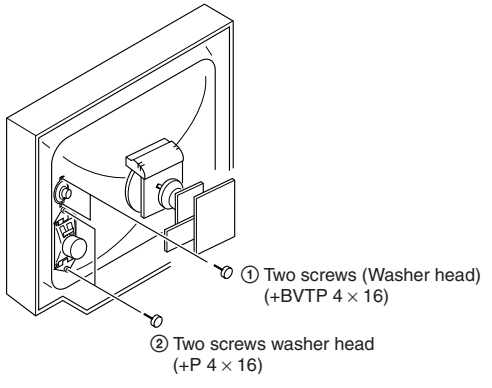
## 2-1. REAR COVER REMOVAL
## (KV-XA29M31/XA29M50/XA29M61)



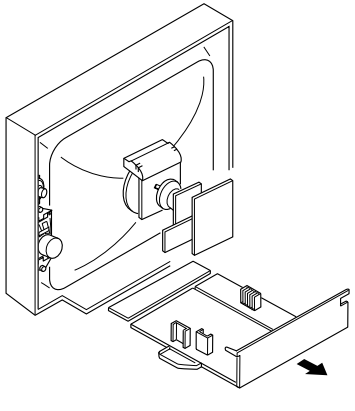

## (KV-XA34M31 only)



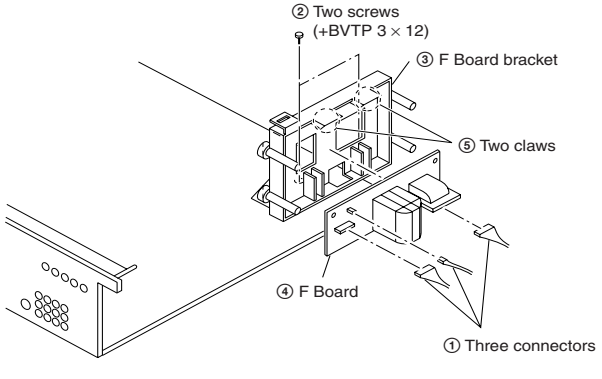

## 2-2. SPEAKER REMOVAL



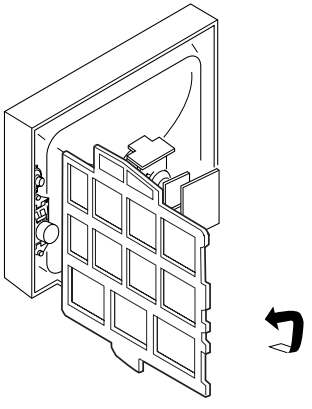

## 2-3. CHASSIS ASSY REMOVAL



## 2-4. F BRACKET REMOVAL



## 2-5. SERVICE POSITION



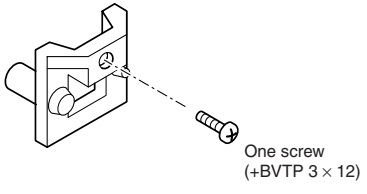
**Note:**

1. Disconnect the speaker connection on the right side first.
2. Undress necessary wires before going to Service Position.

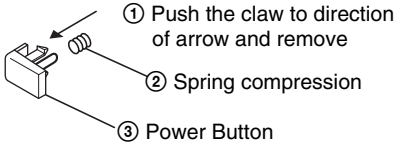
## 2-6. REPLACEMENT OF PARTS

For replacement of light guide,unscrew them, exchange with new parts and fix them with screws respectively.

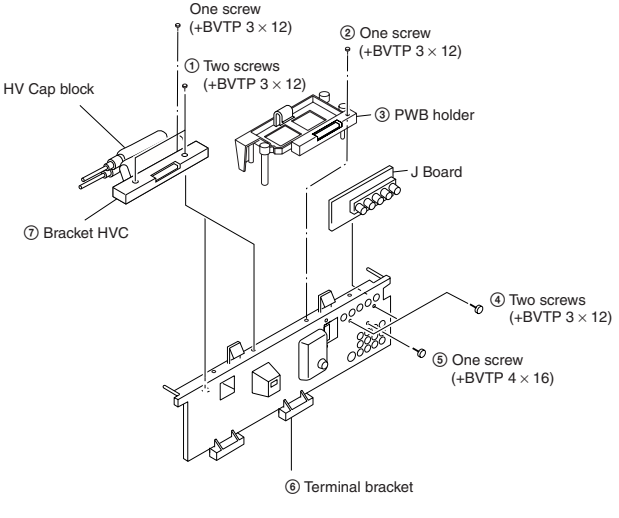
### 2-6-1. Light Guide



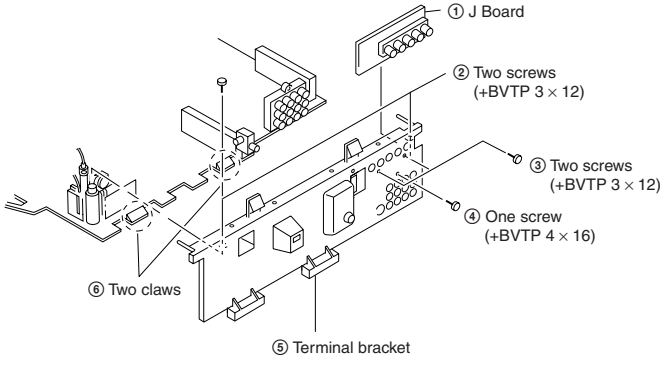

### 2-6-2. Power Button



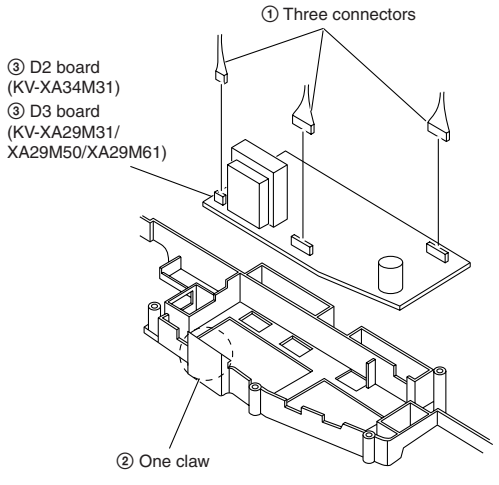

## 2-7. HV CAP BLOCK (KV-XA34M31 only), PWB HOLDER AND J BOARD REMOVAL



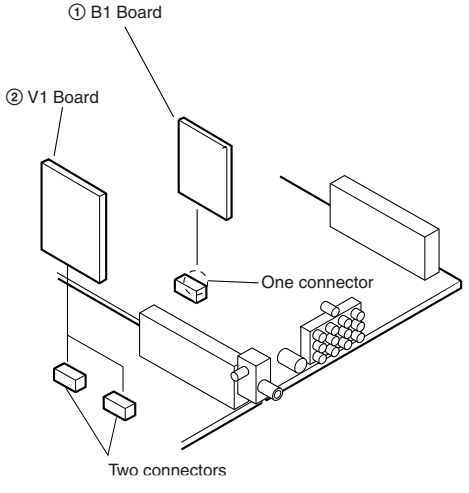

## 2-8. TERMINAL BRACKET REMOVAL



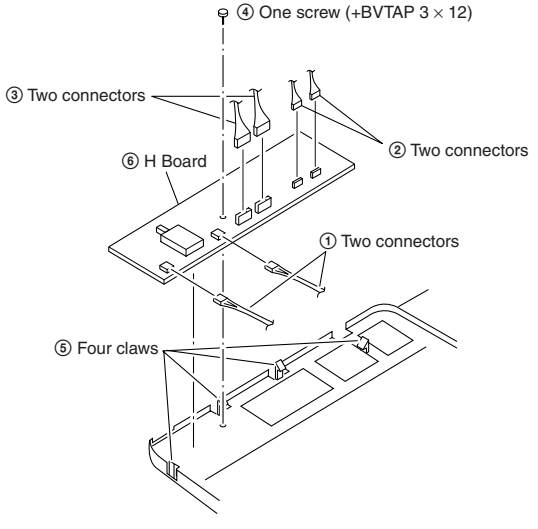
## 2-9. D2 (KV-XA34M31) /D3 (KV-XA29M31/ XA29M50/XA29M61) BOARDS REMOVAL



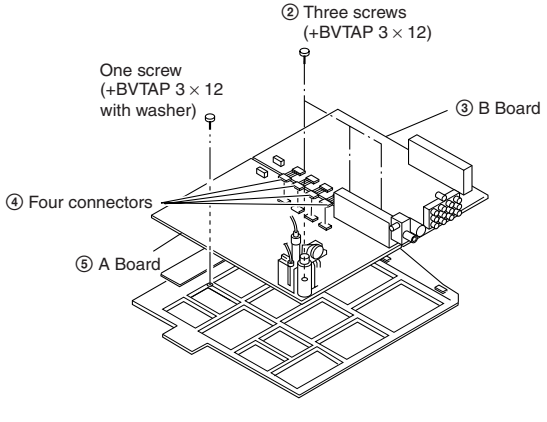

## 2-10. B1 AND V1 (KV-XA29M31/XA29M61/ XA34M31) BOARDS REMOVAL




## 2-11. H BOARD REMOVAL

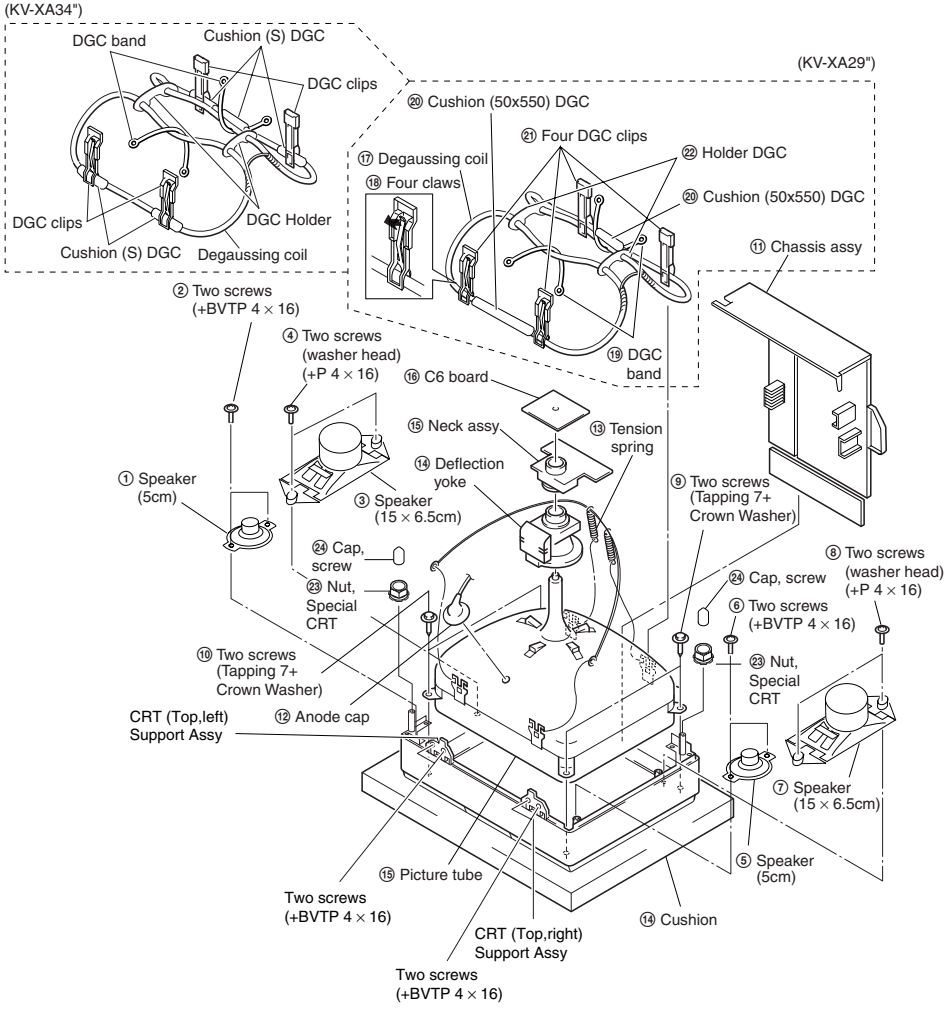



## 2-12. A AND B BOARDS REMOVAL



## 2-13. PICTURE TUBE REMOVAL

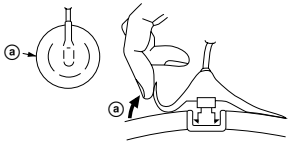
NOTE : i) The picture tube for OCE model is upside down, and the position for the anode cap and tension springs are changed accordingly.
ii) Please remove necessary CRT support located on top left, top right, bottom left, bottom right, prior to removing the CRT.
iii) ⑨ and ⑩ (screws Tapping 7+ Crown Washer) (KV-XA29M31/XA29M50/XA29M61).
iv) Nut, Special, CRT and cap screw (KV-XA34M31 only).



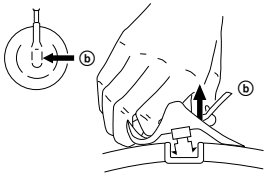

## • REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

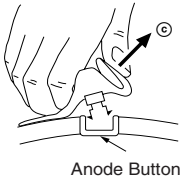
## • REMOVING PROCEDURES




**① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.**




**② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.**

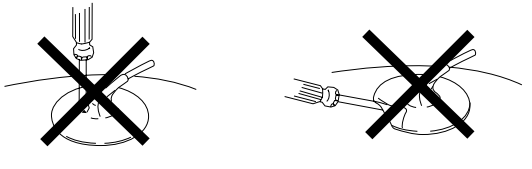



Anode Button

**③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.**

## • HOW TO HANDLE AN ANODE-CAP

**① Do not damage the surface of anode-caps with sharp shaped objects.**
**② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.**
**③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.**



# SECTION 3
# ADVANCE OPERATION

## 3-1. "RESET" FUNCTION

### 1. Purpose

If a customer faces some setting problem that cannot be solved, using the "RESET" function some items will be reset to its original setting (shipment condition)

### 2. How to Operate

The way to access to the "RESET" Function:-

a) By pressing "MENU" button or "SELECT" button (for non-menu models) on the Front Key Input and hold it down for 5 seconds.

### 3. Subsequent of Operation

Sequential to the resetting operation (either methods being used in No. 2), TV set would shut down once and automatically turn on again. The power-off duration is expected to be about 500msec. An OSD message, "RESET" tentatively will be displayed for 10 sec after IK status gets stable.
As a result, some items will be reset to an initial condition (shipment condition) wheareas some other remains at the last selection by user.

Items that remains at the last selection by user

| |
|---|
| Program No., Favourite CH Setup, PIC rotation, OSD Language, Fine tuning, TV System, Skip |

Reset Items

| | | | |
|---|---|---|---|
| Video input | RF | Stereo mode | STEREO/NICAM* (except KV-XA29M50) |
| Volume | 30 | | |
| Picture mode | DYNAMIC | Bilingual mode | MAIN* (except KV-XA29M50 |
| Sound mode | DYNAMIC | | |
| Surround mode | OF | High-deviation mode | AUTO* |
| Color system(video) | AUTO | Child lock | OFF* |
| Favourite CH mode | AUTO | Wide mode | OFF |
| Multi Picture (PIP) | OFF } Not used for | Game mode | OFF |
| PIP position | Bottom Right } this model | Teletext mode | OFF (except KV-XA29M50) |
| OSD recall | OFF | | |
| Intelligent volume | OFF | Sleep timer | OFF |
| ECO mode | OFF | Wake-up timer | OFF |
| Color system(RF) | AUTO* | Sound muting | OFF |
| Antenna sensitivity | HIGH* | | |

*= only when in RF mode

# SECTION 4
# SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

**Note :** Test Equipment Required.

1. Pattern Generator
2. Degausser
3. Oscilloscope

**Preparation :**

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

## 4-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Fig4-2.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side. (See Figures 4-1 through 4-4.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 4-2.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Figure 4-5.)

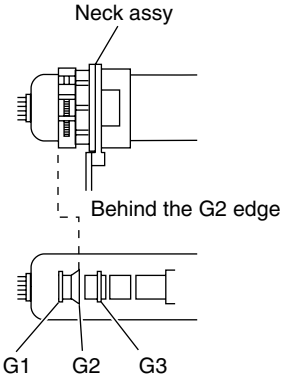



**Fig. 4-1**

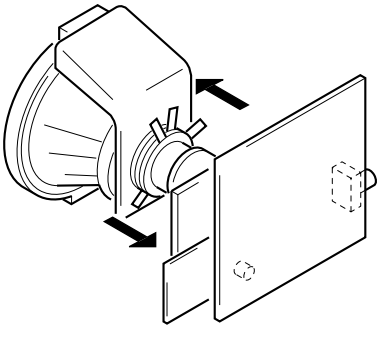


**Fig. 4-2**

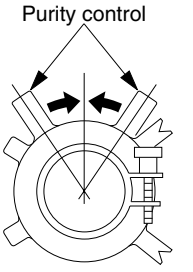



**Fig. 4-3**

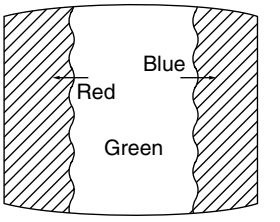



**Fig. 4-4**

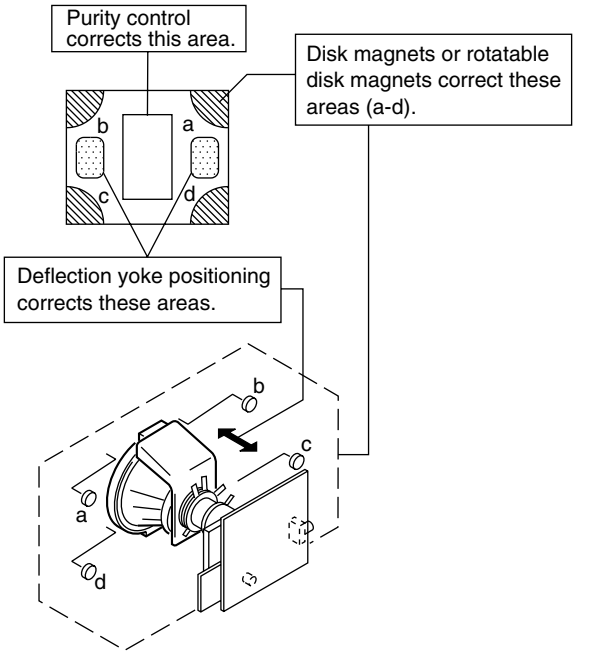


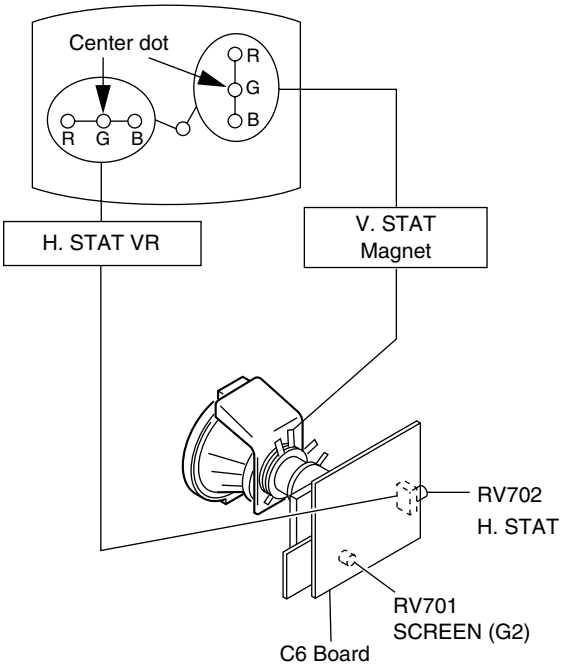

**Fig. 4-5**

## 4-2. CONVERGENCE

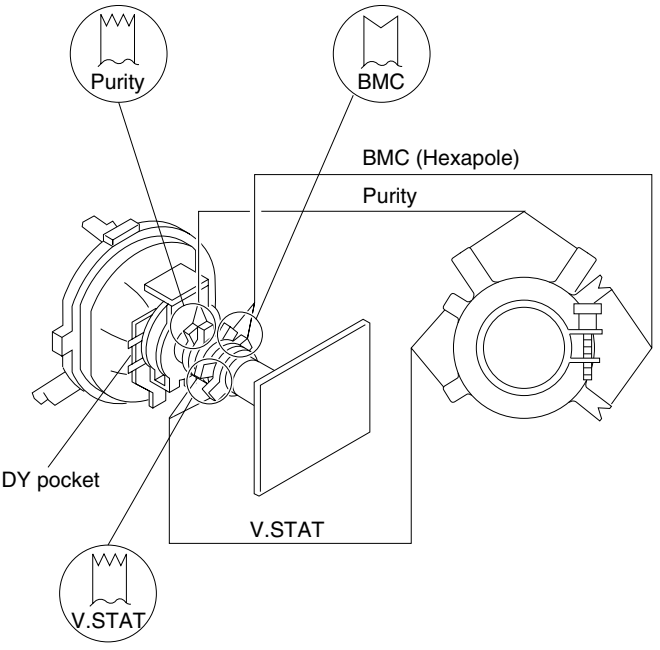
**Preparation :**

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Receive dot/hatch signal.
- Pic mode: Personal (Pic 90%, Brightness 50%, Col 50 %, Hue 50%, Shp 50%).

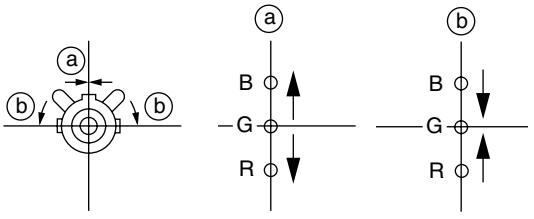
### (1) Horizontal and Vertical Static Convergence



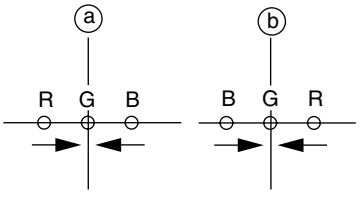

1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)



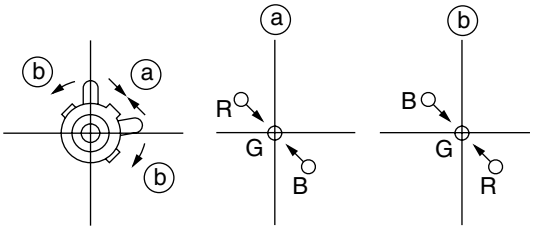

① V. STAT



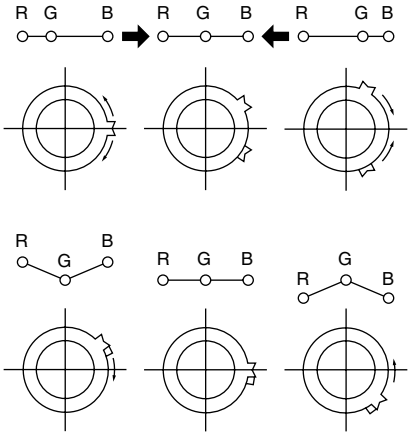

② H. STAT VR

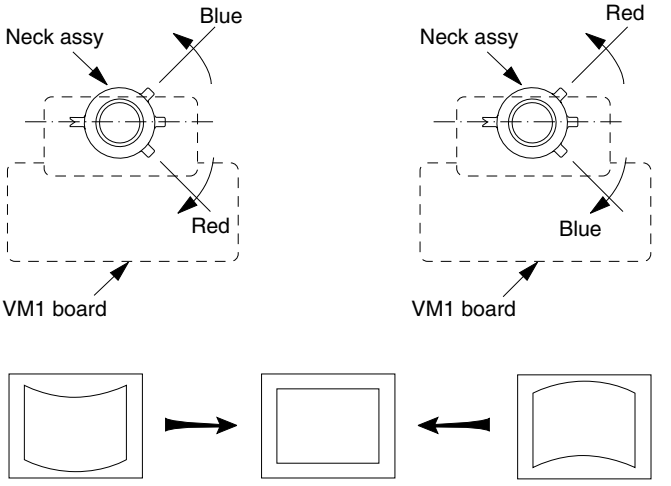



③



④ BMC (Hexapole) Magnet.
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.






⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .
2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.

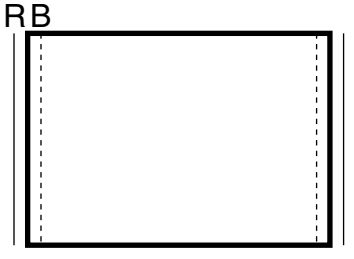
**Note**

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

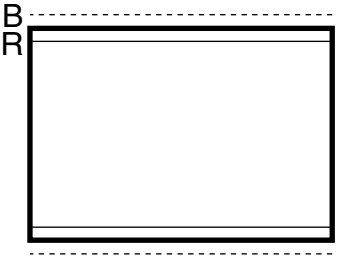
**(2) Dynamic Convergence Adjustment**

**Preparation:**

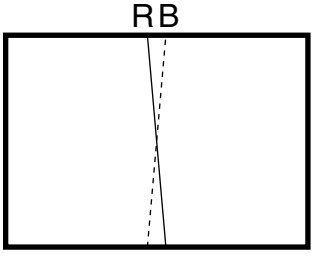
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence



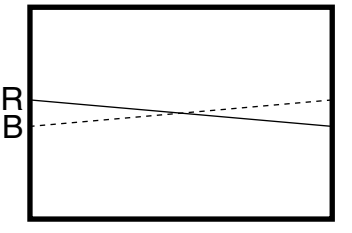

TLH




TLV



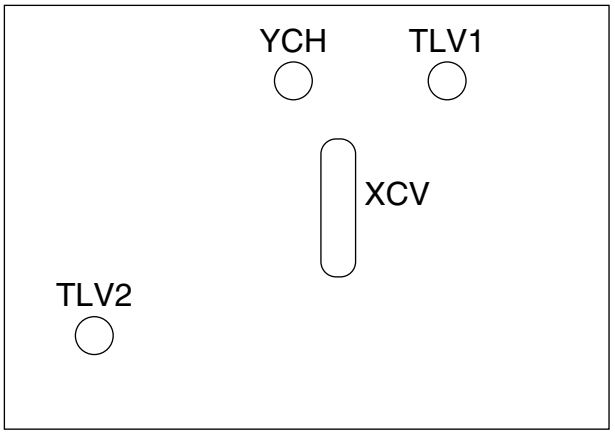

YCH



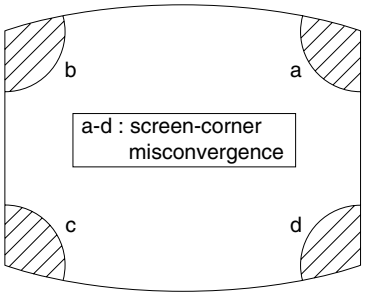

XCV

| | | | |
|---|---|---|---|
| TLV | Rotate | TLV-2 | VOL (29”, 34”) on DY |
| | Rotate | TLV | VOL (25”) on DY |
| XCV | Rotate | XCV | Adj core on DY |
| YCH | Rotate | YCH | VOL on DY |
| TLH | Insert | TLH | Correction Plate to DY Pocket (Left or Right) |

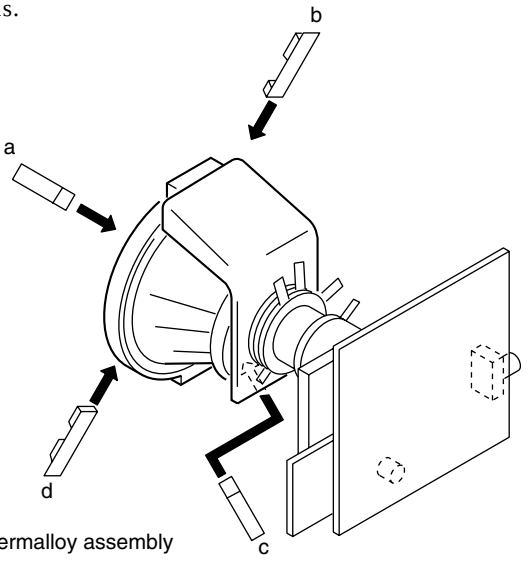
ON DY:




**(3) Screen-corner Convergence**




Fix a Permalloy assy corresponding to the misconverged areas.




## 4-3. FOCUS ADJUSTMENT

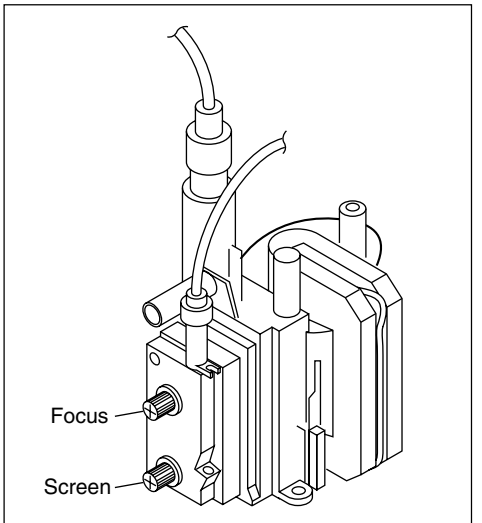
FOCUS adjustment should be completed before W/B adjustment.

**(Except 34")**

1. Receive digital monoscope pattern.
2. Set "Picture Mode" to "DYNAMIC".
3. (a) Adjust focus VR so that the center of screen becomes just focus ( except 25").
   (b) Adjust focus VR so that the lion teeth becomes just focus (25" only).
4. Change the receiving signal to white pattern and blue back.
5. Confirm magenta ring is not noticeable. Incase magenta is very obvious, adjust focus VR to take balance of magenta ring and focus.

**(For 34")**

1. Receive digital monoscope pattern.
2. Set "Picture Mode" to "Standard".
3. Set S2801 to mechanical center position.
4. Adjust focus VR so that the center of the screen becomes just focus.
5. Adjust S2801 when corner focus is unbalance in right and left.
6. Change the receiving signal to white pattern blue back.
7. Confirm Magenta ring is not noticeable. Incase magneta ring is very obvious, reset S2801 to mechanical center posotion and then adjust FOCUS VR to take balance of MAGENTA RING and FOCUS.

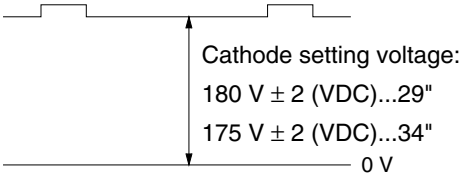



**FLYBACK TRANSFORMER (T503)**

## 4-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

### 1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C6 board cathode to the oscilloscope.
4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

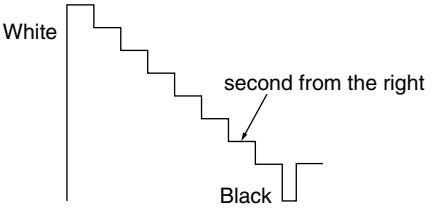



### 2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 5-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the PICTURE to minimum.
4) Select GCT (WHB 4) and BCT (WHB 5) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select GDR (WHB 1) and BDR (WHB 2) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

### 3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black to white from the pattern generator.
3) BRIGHTNESS .... 50%.
   PICTURE ..... MINIMUM
4) Select SBR (WHB7) with [1] and [4], and adjust SBR (WHB7) level with [3] and [6] so that the second stripe from the right is dimly lit.



# SECTION 5
# CIRCUIT ADJUSTMENTS

## 5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments to this model can be performed using the supplied Remote Commander RM-954

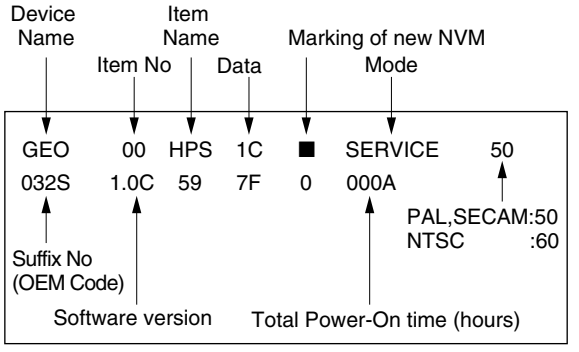
### a. ENTERING SERVICE MODE

With the unit on standby

→ [DISPLAY] → [5] → [VOL (+)] → [POWER]

This operation sequence puts the unit into service mode.

The screen display is :




### b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press [POWER] button on the commander), then press [POWER] button again, hereupon it becomes TV mode.

### c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN), to select the adjustment.
4) Press [MUTING] button to indicate WRITE on the screen.
5) Press [0] button to write into memory.

### d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

| | |
|---|---|
| [1], [4] | Select the adjustment item. |
| ↓ | |
| [3], [6] | Raise/lower the data value. |
| ↓ | |
| [MUTING] | Writes. |
| ↓ | |
| [0] | Executes the writing. |

| | |
|---|---|
| [7], [0] | All the data becomes the values in memory. |
| [8], [0] | All user control goes to the standard state. |
| [5], [0] | Service data initialization (Be sure not to use usually.) |
| [2], [0] | Write 50Hz adjustment data to 60Hz, or vice versa. |

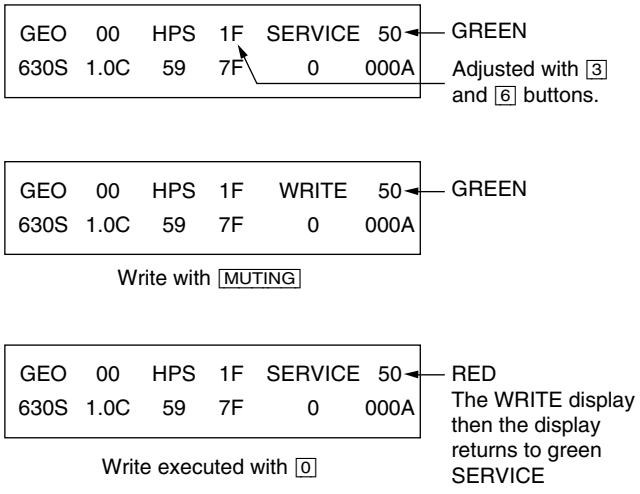
## 5-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

This explanation uses H-Position as an example.

1. Select "GEO 00 HPS" with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the [MUTING] button. (The display changes to WRITE.)
5. Execute the writing with the [0] button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)

Example on screen display :-


GEO 00 HPS 1F SERVICE 50
630S 1.0C 59 7F 0 000A
GREEN
Adjusted with 3 and 6 buttons.
GEO 00 HPS 1F WRITE 50
630S 1.0C 59 7F 0 000A
GREEN
Write with MUTING
GEO 00 HPS 1F SERVICE 50
630S 1.0C 59 7F 0 000A
RED
The WRITE display then the display returns to green SERVICE
Write executed with 0

Use the same method for all Items. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

**Note** : 1. In [WRITE], the data for all items are written into memory together.
2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

## Adjustment Item Table

| 8 TVG | Functionality | | Range | Function | Table & Note | Register No.bit | Device Name Slava Address | RAM Address (bit) | NVM | | | Remarks: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | No. | Name | | | | | | | Slave | Sub | Bit Range | Initial data for tables |
| GEO | 00 | HPS | 3F | H Position | Normal(50/60)/Wide(50/60) | 14 (7-2) | CXA2159S(88H) | - | A0/A4 | (A1/AE)/(44/4F) | 7-2 | 1E (for 50Hz)/16(for 60Hz) |
| | 01 | HSZ | 3F | H Size | Normal(50/60)/Wide(50/60) | 13 (7-2) | | - | A0/A4 | (A0/AD)/(43/4E) | 7-2 | 1F |
| | 02 | PAP | 3F | Pin Amp | Normal(50/60)/Wide(50/60) | 15 (7-2) | | - | A0/A4 | (A2/AF)/(45/50) | 7-2 | 1F |
| | 03 | TLT | 0F | Trapezium | Normal(50/60)/Wide(50/60) | 17 (7-4) | | - | A0/A4 | (A4/B1)/(47/52) | 7-4 | 7 |
| | 04 | VPS | 3F | V Position | Normal(50/60)/Wide(50/60) | 11 (7-2) | | - | A0/A4 | (9E/AB)/(41/4C) | 7-2 | 1F |
| | 05 | VSZ | 3F | V size | Normal(50/60)/Wide(50/60) | 10 (7-2) | | - | A0/A4 | (9D/AA)/(40/4B) | 7-2 | 1F |
| | 06 | SCO | 0F | S Correction | Normal(50/60)/Wide(50/60) | 12 (7-4) | | - | A0/A4 | (9F/AC)/(42/4D) | 7-4 | 7 |
| | 07 | VLN | 0F | V Linearity | Normal(50/60)/Wide(50/60) | 12 (3-0) | | - | A0/A4 | (9F/AC)/(42/4D) | 3-0 | 7 |
| | 08 | BOW | 0F | AFC Bow | Normal(50/60)/Wide(50/60) | 18 (7-4) | | - | A0/A4 | (A5/B2)/(48/53) | 7-4 | 7 |
| | 09 | AGL | 0F | AFC Angle | Normal(50/60)/Wide(50/60) | 18 (3-0) | | - | A0/A4 | (A5/B2)/(48/53) | 3-0 | 7 |
| | 0A | UPN | 3F | Upper Pin | Normal(50/60)/Wide(50/60) | 16 (7-2) | | - | A0/A4 | (A3/B0)/(46/51) | 7-2 | 1F |
| | 0B | LPN | 3F | Lower Pin | Normal(50/60)/Wide(50/60) | 1A (7-2) | | - | A0/A4 | (A7/B4)/(4A/55) | 7-2 | 1F |
| | 0C | HBL | 1 | H Blanking on/off | | 1A (1) | | - | A0 | 9A | 1 | 1 |
| | 0D | LBL | 0F | Left H Blanking | Normal(50/60)/Wide(50/60) | 19 (7-4) | | - | A0/A4 | (A6/B3)/(49/54) | 7-4 | 0B(for 50Hz)/0F(for 60Hz) |
| | 0E | RBL | 0F | Right H Blanking | Normal(50/60)/Wide(50/60) | 19 (3-0) | | - | A0/A4 | (A6/B3)/(49/54) | 3-0 | 2 |
| WHB | 00 | RDR | 3F | R Drive | DYNAMIC/others | 0B (7-2) | CXA2159S(88H) | - | A0 | C0/BA | 7-2 | 25 (DYNAMIC)/ 2A (for OTHERS) |
| | 01 | GDR | 3F | G Drive | DYNAMIC/others | 0C (7-2) | | - | A0 | C1/BB | 7-2 | 1F |
| | 02 | BDR | 3F | B Drive | DYNAMIC/others | 0D (7-2) | | - | A0 | C2/BC | 7-2 | 1F |
| | 03 | RCT | 0F | R Cutoff | SECAM/others | 09 (3-0) | | - | A0 | C3/BD | 3-0 | 7 |
| | 04 | GCT | 0F | G Cutoff | SECAM/others | 0A (7-4) | | - | A0 | C4/BE | 7-4 | 7 |
| | 05 | BCT | 0F | B Cutoff | SECAM/others | 0A (3-0) | | - | A0 | C4/BE | 3-0 | 7 |
| | 06 | BMN | 1F | Brightness Minimum Data | | 08 (7-2) | | - | A0 | 22 | 6-2 | 15 |
| | 07 | SBR | 3F | Sub Brightness Control | | 08 (7-2) | | - | A0 | 23 | 7-2 | 1F |
| | 08 | APB | 3 | Sub Bright Control Switch for Intelligent Picture #3 | | 08 (7-2) | | - | A0 | 23 | 1-0 | 3 |
| SAJ | 00 | PMX | 3F | Picture Maximum Data | non-Wide/Wide | 05 (7-2) | CXA2159S(88H) | - | A0 | 21/20 | 7-2 | 38(NON-WIDE) / 33 (WIDE) |
| | 01 | SHU | 0F | Sub Hue Control | TV/Video | 07 (7-2) | | - | A0 | 24/38 | 5-2 | 8 |
| | 02 | SSH | 0F | Sub Sharpness Control | TV/Video | 09 (7-4) | | - | A0 | 25/36 | 7-4 | 04 (for TV) / 09 (FOR VIDEO) |
| | 03 | SCL | 3F | Sub Color Control | (NTSC/others)/WIDE(NTSC/others) | 06 (7-2) | | - | A0 | (37/26)(3C/3B) | 7-2 | 1F |
| VP | 00 | EHT | 0F | EHT Comp | 50/60Hz | 17 (3-0) | CXA2159S(88H) | - | A0[/A4] | A4/B1[/(47/52)] | 3-0 | 5 |
| | 01 | GMA | 3 | Gamma Correction (sepatated in STANDARD mode) | NON-STD.(NTSC/Others)/STD.(NTSC/Others) | 0D (1-0) | | - | A4 | 68/67/6A/69 | 1-0 | 02(NON-STANDARD)/01 (STANDARD) |
| | 02 | APG | 1 | Gamma Control Switch for Intelligent Picture #3 | NON-STD.(NTSC/Others)/STD.(NTSC/Others) | 0D (1-0) | | - | A4 | 68/67/6A/69 | 2 | 0 |
| | 03 | YDL | 0F | Y Delay | PAL/SECAM/NTSC/DVD | 0E (3-0) | | - | A4 | 3C/3E/3D/3F | 3-0 | (06/09/08/08 for PAL/SECAM/NTSC/DVD) |
| | 04 | SST | 3 | SECAM ID Start Position | SECAM&AUTO/FORSED-PAL&NTSC | 03 (5-4) | | - | A4 | 6B/6D | 5-4 | 01(for SECAM/AUTO)/01(for forced PAL/NTSC) |
| | 05 | SSP | 3 | SECAM ID Stop Position | SECAM&AUTO/FORSED-PAL&NTSC | 03 (7-6) | | - | A4 | 6B/6D | 7-6 | 01(for SECAM/AUTO)/01(for forced PAL/NTSC) |
| | 06 | RLM | 3 | RGB Limit | | 03 (1-0) | | - | A0 | 83 | 1-0 | 0 |
| | 07 | SLV | 03 | SECAM ID Level | SECAM&AUTO/FORSED-PAL&NTSC | 04 (1-0) | | - | A4 | 6C/6E | 1-0 | 02(for SECAM/AUTO)/02(for forced PAL/NTSC) |
| | 08 | SBF | 3F | SECAM BELL f0 | SECAM&AUTO/FORSED-PAL&NTSC | 04 (7-2) | | - | A4 | 6C/6E | 7-2 | 22(for SECAM/AUTO)/22(for forced PAL/NTSC) |
| | 09 | DYC | 1 | Dynamic Color on/off | | 0C (1) | | - | A0 | 8C | 1 | 1 |
| | 0A | ABL | 1 | ABL Mode Switching (except STANDARD mode) | except STANDARD | 0B (1) | | - | A0 | 8B | 1 | (00 for STANDARD)/01(OTHERS) |
| | 0B | VTH | 1 | ABL Detection Vth Switching | | 0B (0) | | - | A0 | 8B | 0 | 1 |
| | 0C | SFO | 1 | FO Switching for Sharpness | NTSC/others | 07 (1) | | - | A4 | 5C/59 | 1 | 1 |
| | 0D | DCX | 1 | DC Trans. Ratio Switching | | 08 (1) | | - | A0 | 88 | 1 | 1 |

## Adjustment Item Table

| TVG | Functionality | | Initial | Range | Function | Table & Note | Register No.bit | Slava Address | RAM Address (bit) | NVM | | | Remarks: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | No. | Name | | | | | | | | Slave | Sub | Bit Range | Initial data for tables |
| VP | 0E | SHT | - | 1 | Pre-/Overshoot ratio Switch | NTSC/others | 08 (0) | CXA2159S(88H) | - | A4 | 5D/59 | 0 | 1 |
| | 0F | HDW | - | 1 | H Drive Pulse Width Switch | | 00 (6) | | - | A0 | 80 | 6 | 0 |
| | 10 | AFC | - | 03 | AFC Gain Control | TV/Video/Text | 11 (1-0) | | - | A0 | 28/29/2A | 1-0 | 01/00/01 (for TV/VIDEO/TEXT) |
| | 11 | HOS | - | 0F | H Oscillation | | 0E (7-4) | | - | A0 | 8E | 7-4 | 7 |
| | 12 | HSS | - | 1 | Slice Level of H Sync Sep. | | 0F (1) | | - | A0 | 8F | 1 | 0 |
| | 13 | VSS | - | 1 | Slice Level of V Sync Sep. | | 0F (0) | | - | A0 | 8F | 0 | 0 |
| | 14 | HMS | - | 1 | Macro Vision C/m off/on | 50/60Hz | 10 (0) | | - | A0[/(A4)] | 9D/AA[/(40/4B)] | 0 | 1 |
| | 15 | YUV | - | 1 | Y SEL | | 00 (2) | | - | A0 | 80 | 2 | 0 |
| | 16 | CDV | - | 3 | CD mode for Video and RF under no signal | Video only | 0F (5-4) | | - | A0 | 2B | 5-4 | 1 |
| | 17 | RON | - | 1 | R ON | not memorized | 01 (2) | | - | A0 | 81 | 2 | 1 |
| | 18 | GON | - | 1 | G ON | not memorized | 01 (1) | | - | A0 | 81 | 1 | 1 |
| | 19 | BON | - | 1 | B ON | not memorized | 01 (0) | | - | A0 | 81 | 0 | 1 |
| | 1A | PON | - | 1 | P ON | not memorized | 00 (7) | | - | A0 | 80 | 7 | 1 |
| | 1B | AXN | - | 1 | AXIS SW | NTSC/others (only for DYNAMIC) | 07 (0) | | - | A0 | 37/26[(3C/3B)] | 0 | 1 |
| | 1C | RSL | - | 1 | RGB SEL | | 0C (0) | | - | A0 | 8C | 0 | 0 |
| | 1D | VBW | - | 3 | VBLKW | | 16 (1-0) | | - | A0 | 96 | 1-0 | 0 |
| | 1E | RFP | - | 1 | REFP | | 14 (0) | | - | A0 | 94 | 0 | 0 |
| | 1F | VMC | - | 3 | VM Level | | 03 (3-2) | | - | A0 | 83 | 3-2 | 0 |
| AP | 00 | AGC | - | 1 | AGC On/off Control | | 05 (7) | BH3868AFS(80H) | - | A6 | 05 | 7 | 0 |
| | 01 | SON | - | 1 | Surround On/off | | 05 (6) | | - | A6 | 05 | 6 | 0 |
| | 02 | SST | - | 1 | Surround Stereo | | 05 (5) | | - | A6 | 05 | 5 | 0 |
| | 03 | SMO | - | 1 | Surround Monoral | | 05 (4) | | - | A6 | 05 | 4 | 0 |
| | 04 | LOP | - | 1 | Surround Effect Enhancer | | 05 (3) | | - | A6 | 05 | 3 | 0 |
| | 05 | SUR | - | 7 | Surround Effect | | 05 (2-0) | | - | A6 | 05 | 2-0 | 0 |
| | 06 | BAS | - | 1F | Bass Sound Mode Control | dyna/drama/soft | 03 (6-0) | | - | A6 | 06/09/0C | 4-0 | 12/10/10 (for DYNAMIC/DRAMA/SOFT) |
| | 07 | TRE | - | 1F | Treble Sound Mode Control | dyna/drama/soft | 04 (6-0) | | - | A6 | 07/0A/0D | 4-0 | 13/13/10 (for DYNAMIC/DRAMA/SOFT) |
| | 08 | TRF | - | 3 | Treble data offset | | 04 (6-0) | | - | A6 | 11 | 1-0 | 2 |
| | 09 | BBE | - | FF | BBE Sound Mode Control | dyna/drama/soft | 02 (7-0) | | - | A6 | 08/0B/0E | 7-0 | 99/D5/00 (for DYNAMIC/DRAMA/SOFT) |
| MSP | 00 | WST | - | FF | W/G Stereo Threshold | | | MSP3415D(84H) | - | A0 | 60 | 7-0 | 15 |
| | 01 | WBT | - | FF | W/G Bilingual Threshold | | | | - | A0 | 61 | 7-0 | EC |
| | 02 | WLL | - | FF | W/G Monaural Threshold | | | | - | A0 | 62 | 7-0 | 5 |
| | 03 | WAC | - | 0F | W/G Agreement Count | | | | - | A0 | 63 | 3-0 | 1 |
| | 04 | WDL | - | FF | W/G Search Delay | | | | - | A0 | 64 | 7-0 | 30 |
| | 05 | NDL | - | FF | NICAM Search Delay | | | | - | A0 | 65 | 7-0 | 20 |
| | 06 | SDL | - | FF | Stereo Status Read Delay | | | | - | A0 | 66 | 7-0 | 10 |
| | 07 | AGC | - | 1 | AGC Switch Auto/Constant | | 00BB (7) | | - | A0 | 68 | 7 | 1 |
| | 08 | REL | - | 3F | AGC Gain at Constant Mode | | 00BB (6-1) | | - | A0 | 68 | 6-1 | 28 |
| | 09 | CRM | - | 1 | Carrier muting on/off | | 00BB (9) | | - | A0 | 67 | 1 | 0 |
| | 0A | ACO | - | 1 | Audio Clock out on/off | | 0083 (5) | | - | A0 | 69 | 5 | 1 |

## Adjustment Item Table

| TVG | Functionality | | Initial | Range | Function | Table & Note | Register No.bit | Slava Address | RAM Address (bit) | NVM | | | Remarks: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | No. | Name | | | | | | | | Slave | Sub | Bit Range | Initial data for tables |
| MSP | 0B | FP | - | 7F | FM Prescale for non-M system | | 000E (14-8) | MSP3415D(84H) | - | A0 | 6A | 6-0 | 1B |
| | 0C | FPM | - | 7F | FM Prescale for M system | | 000E (24-8) | | - | A0 | 6B | 6-0 | 32 |
| | 0D | FH | - | 7F | FM Prescale for HDEV | | 000E (14-8) | | - | A0 | 6C | 6-0 | 36 |
| | 0E | FHM | - | 7F | FM Prescale for HDEV and M | | 000E (14-8) | | - | A0 | 6D | 6-0 | 65 |
| | 0F | WGP | - | 7F | W/G Prescale | | 000E (14-8) | | - | A0 | 6E | 6-0 | 1C |
| | 10 | NIP | - | 7F | NICAM Prescale | | 0010 (14-8) | | - | A0 | 6F | 6-0 | 7F |
| | 11 | ERR | - | FF | Auto FM Switch Threshold | | 0021 (10-3) | | - | A0 | 70 | 7-0 | 50 |
| | 12 | VOL | - | FF | Loud Speaker gain 7000h to 7ff0h | | 0000 (15-4) | | - | A4 | 62 | 7-0 | 6D |
| SVP | 00 | SBF | - | 3F | SECAM BELL f0 | | 1C (7-2) | CXA2139S(8AH) | - | A4 | 11 | 7-2 | 22 |
| | 01 | HOS | - | 0F | H Oscillation | | 0C (7-4) | | - | A4 | 0C | 7-4 | 7 |
| | 02 | SHU | - | 0F | Sub Hue Control | TV/Video | 05 (7-2) | | - | A4 | 2D/2F | 5-2 | 8 |
| | 03 | AFC | - | 3 | AFC Gain | TV/Video | 0F (0) | | - | A4 | 31/32 | 1-0 | 1 |
| PIP | 00 | SDL | - | 0F | Delay of Output SELECT | | 01 (6-3) | SDA9288X(D6H) | - | A4 | 1C | 6-3 | 2 |
| | 01 | PPH | - | FF | H Position of TOP-LEFT Pin P | | 01/02 | | - | A4 | 29 | 7-0 | 15 |
| | 02 | PPV | - | FF | V Position of TOP-LEFT Pin P | | 03 (7-0) | | - | A4 | 2A | 7-0 | 2E |
| | 03 | YDL | - | 7 | Delay of Luminance Input | | 04 (2-0) | | - | A4 | 1F | 2-0 | 0 |
| | 04 | HDI | - | 0F | H Sync Delay for Inset | | 06 (3-0) | | - | A4 | 21 | 3-0 | 0 |
| | 05 | ISC | - | 1 | Inset Clock Selection | | 06 (4) | | - | A4 | 21 | 4 | 1 |
| | 06 | CLP | - | 1 | Clamp Pulse Selection | | 06 (5) | | - | A4 | 21 | 5 | 1 |
| | 07 | CLC | - | 1 | Clamp Cycle Selection | | 06 (6) | | - | A4 | 21 | 6 | 0 |
| | 08 | CON | - | 0F | Contrast Adjustment for inset | | 09 (7-4) | | - | A4 | 24 | 7-4 | 0 |
| | 09 | PLL | - | 3 | H Position For A-ch | | 0D (6-5) | | - | A4 | 28 | 6-5 | 2 |
| | 0A | PDV | - | 0F | PIP V Pedestal Level | | 0E (7-4) | | - | A4 | 57 | 7-4 | 0 |
| | 0B | PDU | - | 0F | PIP U Pedestal Level | | 0E (3-0) | | - | A4 | 57 | 3-0 | 0 |
| TXT | 00 | TXH | - | 3 | Teletext Horizontal Position | | 10 (1-0) | SAA5261(58H) | - | A4 | 58 | 1-0 | 0 |
| | 01 | TXV | - | 3 | Teletext Vertical Position | | 10 (5-4) | | - | A4 | 58 | 5-4 | 0 |
| OPM | 00 | OSH | - | 3F | OSD H Position | Option-Misc | 1F1 | CXP750097(60H) | - | A0 | 27 | 7-2 | 0D |
| | 01 | COM | - | 03 | Comb Selection (0: None, NTSC, 2: Digital, 3: 3D) | | | | - | A0 | 50 | 7-6 | 2 |
| | 02 | APC | - | 1 | APC Switch | | | | - | A0 | 4F | 5 | 1 |
| | 03 | TSY | - | 3 | TV Sys at Auto TV Sys | | | | - | A0 | 4F | 4-3 | 0 |
| | 04 | MUT | - | 1 | No Signal Mute | | | | - | A0 | 4F | 0 | 0 |
| | 05 | AFM | - | 1 | Auto FM Switch | | | | - | A0 | 4F | 1 | 1 |
| | 06 | RFB | - | 3 | C-BPF Control | | | | - | A0 | 50 | 5-4 | 0 |
| | 07 | TV0 | - | 7 | Tilt to V-Angle Offset | | | | - | A0 | 50 | 2-0 | 2 |
| | 08 | DBL | - | 1 | Disable Blueback Function | | | | - | A0 | 4F | 2 | 0 |
| | 09 | SSO | - | 3 | Speed Search Option (0-Off, 1-4X, 2-6X, 3-8x) | | | | - | A0 | 4F | 7-6 | 1 |
| OPB | 00 | OP1 | - | FF | Optional Bits 1 (see the specified sheet) | Option-Bits | | CXP750097(60H) | - | A0 | 2D | 7-0 | FF |
| | 01 | OP2 | - | FF | Optional Bits 2 (see the specified sheet) | | | | - | A0 | 2E | 7-0 | # |
| | 02 | OP3 | - | FF | Optional Bits 3 (see the specified sheet) | | | | - | A0 | 2F | 7-0 | # |
| | 03 | OP4 | - | FF | Optional Bits 4 (see the specified sheet) | | | | - | A0 | 30 | 7-0 | # |

**NOTE**

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory. In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

**ITEM INFORMATION**

**No. OPB0 OP1**

| Item | XTAL 4.43 | XTAL 3.58 | SECAM | 2nd. Lang | B/G | I | D/K | M |
|---|---|---|---|---|---|---|---|---|
| **KV-XA29M31** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **KV-XA29M50** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **KV-XA29M61** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **KV-XA34M31** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

**No. OPB1 OP2**

| Item | TOP | NICAM | HDEV | Thai Bil | Dis Fav. | DVD Input | AV Input | |
|---|---|---|---|---|---|---|---|---|
| **KV-XA29M31** | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| **KV-XA29M50** | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| **KV-XA29M61** | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| **KV-XA34M31** | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |

AV Input 00 = no AV Input 01 = 1 AV Input
10 = 2 AV Input 11 = 3 AV Input
DVD Input Effective only when "AV Input" is set to 3 AV Input
Dis Fav. Disable Favorite Channel (Effective For XF-L (21" & 14") Models Only)

**No. OPB2 OP3**

| Item | PIC Rotate*1 | 2199 Curve*1 | Auto PIC | Auto TV sys | US ST | AV Mono*1 | 11 KEY | Colour SW*2 |
|---|---|---|---|---|---|---|---|---|
| **KV-XA29M31** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| **KV-XA29M50** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| **KV-XA29M61** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| **KV-XA34M31** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

PIC Rotate*1 PIC Rotation Switch 0 = disabled, 1 = enabled
2199 Curve*1 2199 volume Curve Selection 0 = Others, 1 = 2199 Volume Curve.
Auto PIC*3 Auto Picture Improvement 0 = off PNC1/PNC2
1 = activate PNC1/PNC2
A-TVsys Auto TV System in Auto Program 0 = disabled, 1 = enabled
US ST* USA Stereo 0 = disabled, 1 = enabled
AV MONO*1 AV Mono model 0 = Stereo, 1 = Mono
(No Balance & Surround selection)
11 Key Front Key Selection 0 = 7 key model, 1 = 11 key model
Color SW*2 Color Data Selection in Dynamic Mode 0 = 65 (No PIP), 1 = 57 (PIP)

Note: *1 - For XA21 Models Only
*2 - For XA25/29/34 Models Only
*3 - For PNC3, the enables are from service item APG and APB.

**No. OPB3 *OP4**

| Item | PNC2 | Korean ST | Vid NTSC3.58 | Wide | Video3 | Chinese | Arabic | Thai |
|---|---|---|---|---|---|---|---|---|
| **KV-XA29M31** | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| **KV-XA29M50** | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| **KV-XA29M61** | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| **KV-XA34M31** | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |

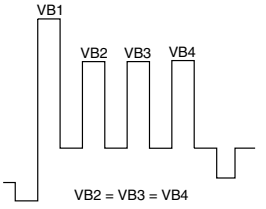
APPLICABLE TO XS ONLY - Sub Language Selection (Bit 0 - Bit 2)
Korean Stereo* Korean Stereo 0 = disabled, 1 = enabled
PNC2*2 Enable switch of PNC2 0 = disable, 1 = enable
Video NTSC3.58* Video Color System 0 = Multi System, 1 = Single System (NTSC3.58)
Wide Enable wide mode 0 = disable, 1 = enable

Note : *APPLICABLE FOR NTSC MODELS ONLY

## 5-3. PICTURE QUALITY ADJUSTMENTS

### SUB COLOR ADJUSTMENT (KV-XA25/XA29)

1. Select Video.
2. Input a PAL color-bar.
3. Set to the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Set to Service Mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust to VB2=VB3=VB4 with [3] and [6].
6. Press [MUTING] → [0] of the commander to write the data.
7. Adjust SAJ 3 'SCL' as step 3 to 5 when receiving NTSC color-bar.
8. Select the 'Wide' mode, write the 'same data-3 steps' for both PAL and NTSC input.



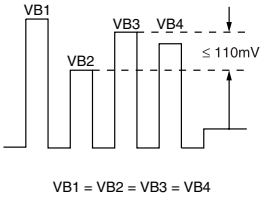

VB2 = VB3 = VB4 (Difference is within 70mV)

### SUB COLOR ADJUSTMENT (KV-XA34)

1. Select Video.
2. Input PAL Color Bar
3. Set to following condition PICTURE 100%, BRIGHTNESS 50%, Color 50%.
4. Connect an oscilloscope to pin ① (BOUT) of CN305, A Board.
5. Set the service mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust the VB2=VB3=VB4 [3] and [6].
6. Press [MUTING] → [0] of the commander to write the data.
7. Add 6 steps and save the data.
8. Input NTSC Color Bar to the TV set and repeat items (3 to 7).
9. Select "WIDE" mode, write the "SAME DATA" for both PAL and NTSC Color Bar input.

### SUB HUE ADJUSTMENT

1. Select Video 1.
2. Input a NTSC 3.58 color-bar, video into Video 1.
3. Set the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 "SHU" with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].




The highest level of VB1,VB2,VB3,VB4 must be aligned at the same line. Ideal difference level between VB2 and VB3 should be within ± 110mV.

6. Press [MUTING] → [0] of the commander to write the data.
7. Adjust SAJ 1 "SHU" as step 3 to 6 when receiving TV mode.

## 5-4. DISPLAY POSITION ADJUSTMENT

### PIP POSITION (Not used for these models)

1. Input a PAL color-bar.
2. Press PIP button of the remote commander to set the PIP picture.
3. Set to Service Mode.
4. Use [1] and [4] of the remote commander to select PIP 1 "PPH" and use [3] and [6] to set data "15".
5. Select PIP 2 "PPV" to set data "2E".
6. Press [MUTING] → [0] of the remote commander to write the data.
7. Use the screen display menu changing the PIP position to check the PIP position.

## 5-5. DEFLECTION ADJUSTMENT

**NORMAL MODE (50Hz)**

1. Set to Service Mode.
2. Using the [1] and [4] button, select category GEO (Service Mode).
3. Raise/lower the data using the [3] and [6] buttons.
   Select and adjust the following items to obtain optimum image.

Service Item

| | | | |
|---|---|---|---|
| GEO : | 00 | HPS | H POSITION |
| | 01 | HSZ | H SIZE |
| | 02 | PAP | PIN AMP |
| | 03 | TLT | TILT |
| | 04 | VPS | V POSITION |
| | 05 | VSZ | V SIZE |
| | 06 | SCO | S CORRECTION |
| | 07 | VLN | V LINEARITY |
| | 08 | BOW | AFC BOW |
| | 09 | AGL | AFC ANGLE |
| | 0A | UPN | UPPER CORNER PIN |
| | 0B | LPN | LOWER CORNER PIN |

**WIDE MODE (50Hz)**

4. Input PAL color bar.
5. Adjust condition change to WIDE MODE : ON.
6. Using the [1] and [3] button, select category GEO (Service Mode).
7. Copy (item from normal mode (50Hz)) adjusted data for the following item:

Service Item

| | | | |
|---|---|---|---|
| GEO : | 01 | HSZ | H POSITION |
| | 05 | VSZ | V POSITION |
| | 06 | SCO | S CORRECTION |
| | 07 | VLN | V LINEARITY |

8. Raise/lower data using [3] and [6] buttons, select and adjust the following items to obtain optimum image.

Service Item

| | | | |
|---|---|---|---|
| GEO : | 00 | HPS | H POSITION |
| | 02 | PAP | PIN AMP |
| | 03 | TLT | TILT |
| | 04 | VPS | V POSITION |
| | 08 | BOW | AFC BOW |
| | 09 | AGL | AFC ANGLE |
| | 0A | UPN | UPPER CORNER PIN |
| | 0B | LPN | LOWER CORNER PIN |

9. After confirm WIDE MODE : ON – OFF.
10. Repeat same steps for NTSC input signal.

**NORMAL MODE (60Hz)**

11. Input 525/60Hz signal.
12. Using the [1] and [4] buttons select category GEO (Service Mode).
13. Select and adjust the following items to obtain obtimum image. Raise/lower the data with the [3] and [6] buttons.

Service Item

| | | | |
|---|---|---|---|
| GEO : | 00 | HPS | H POSITION |
| | 01 | HSZ | H SIZE |
| | 02 | PAP | PIN AMP |
| | 03 | TLT | TILT |
| | 04 | VPS | V POSITION |
| | 05 | VSZ | V SIZE |
| | 06 | SCO | S CORRECTION |
| | 07 | VLN | V LINEARITY |
| | 08 | BOW | AFC BOW |
| | 09 | AGL | AFC ANGLE |
| | 0A | UPN | UPPER CORNER PIN |
| | 0B | LPN | LOWER CORNER PIN |

**WIDE MODE (60Hz)**

14. Input monoscope signal.
15. Adjust condition change to WIDE MODE: ON.
16. Using the [1] and [4] button select category GEO (Service Mode).
17. Copy (item from NORMAL MODE (60Hz)) adjusted data for the following items:

Service Item

| | | | |
|---|---|---|---|
| GEO : | 01 | HSZ | H SIZE |
| | 05 | VSZ | V SIZE |
| | 06 | SCO | S CORRECTION |
| | 07 | VLN | V LINEARITY |

18. Raise/lower the data with the [3] and [6] buttons. Select and adjust the following items to obtain optimum image.

Service Item

| | | | |
|---|---|---|---|
| GEO : | 00 | HPS | H POSITION |
| | 02 | PAP | PIN AMP |
| | 03 | TLT | TILT |
| | 04 | VPS | V POSITION |
| | 08 | BOW | AFC BOW |
| | 09 | AGL | AFC ANGLE |
| | 0A | UPN | UPPER CORNER PIN |
| | 0B | LPN | LOWER CORNER PIN |

19. After confirm WIDE MODE : ON – OFF.

Note:
For Deflection Adjustment, set PICTURE MODE to "SOFT".

## 5-6. H-TRAPEZOID ADJUSTMENT

1. Receive cross hatch/dot signal.
2. Adjust RV1801 on C6 board to make H-Trapezoid distortion best.

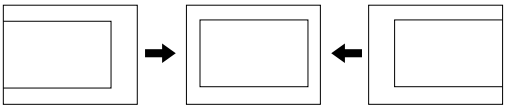
## 5-7. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.
2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.
3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the fine adjustment.
   Write the data per each item number ([MUTING] +[0]).
4. Select item numbers “OPB00” (OP1), “OPB01” (OP2), "OPB 02" (OP3) and "OPB 03" (OP4) respectively set the bit per model with command buttons [3] and [6].
5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (This will also cancel Service Mode.)

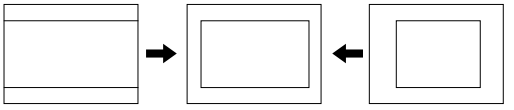
## 5-8. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

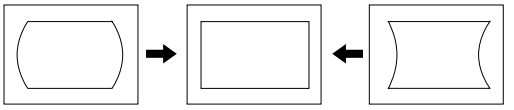
GEO 0 HPS (H POSITION)



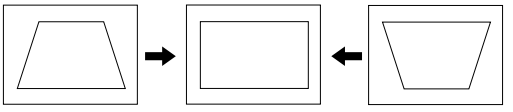
GEO 1 HSZ (H SIZE)



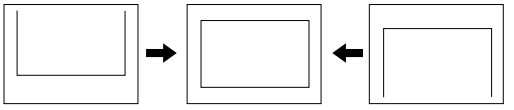
GEO 2 PAP (PIN AMP)



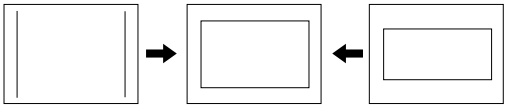
GEO 3 TLT (TRAPEZIUM)



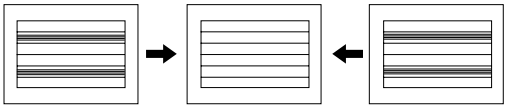
GEO 4 VPS (V POSITION)



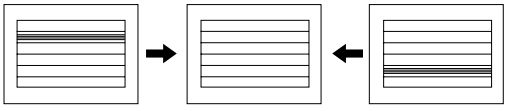
GEO 5 VSZ (V SIZE)



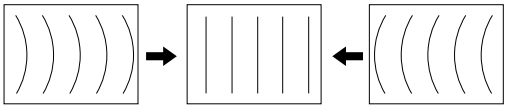
GEO 6 SCO (VERTICAL S-Correction)



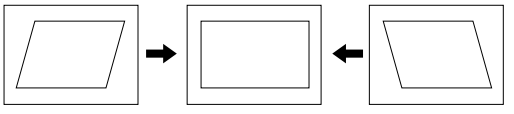
GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

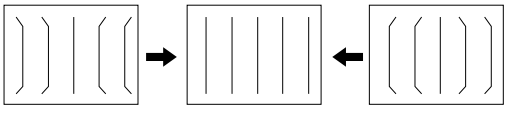


GEO 9 AGL (AFC.ANGLE)



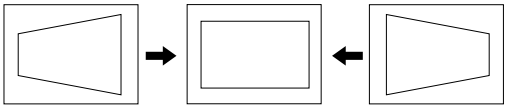
GEO 0A UPN (UPPER CORNER PIN)

GEO 0B LPN (LOWER CORNER PIN)



## PICTURE DISTORTION ADJUSTMENT (2)

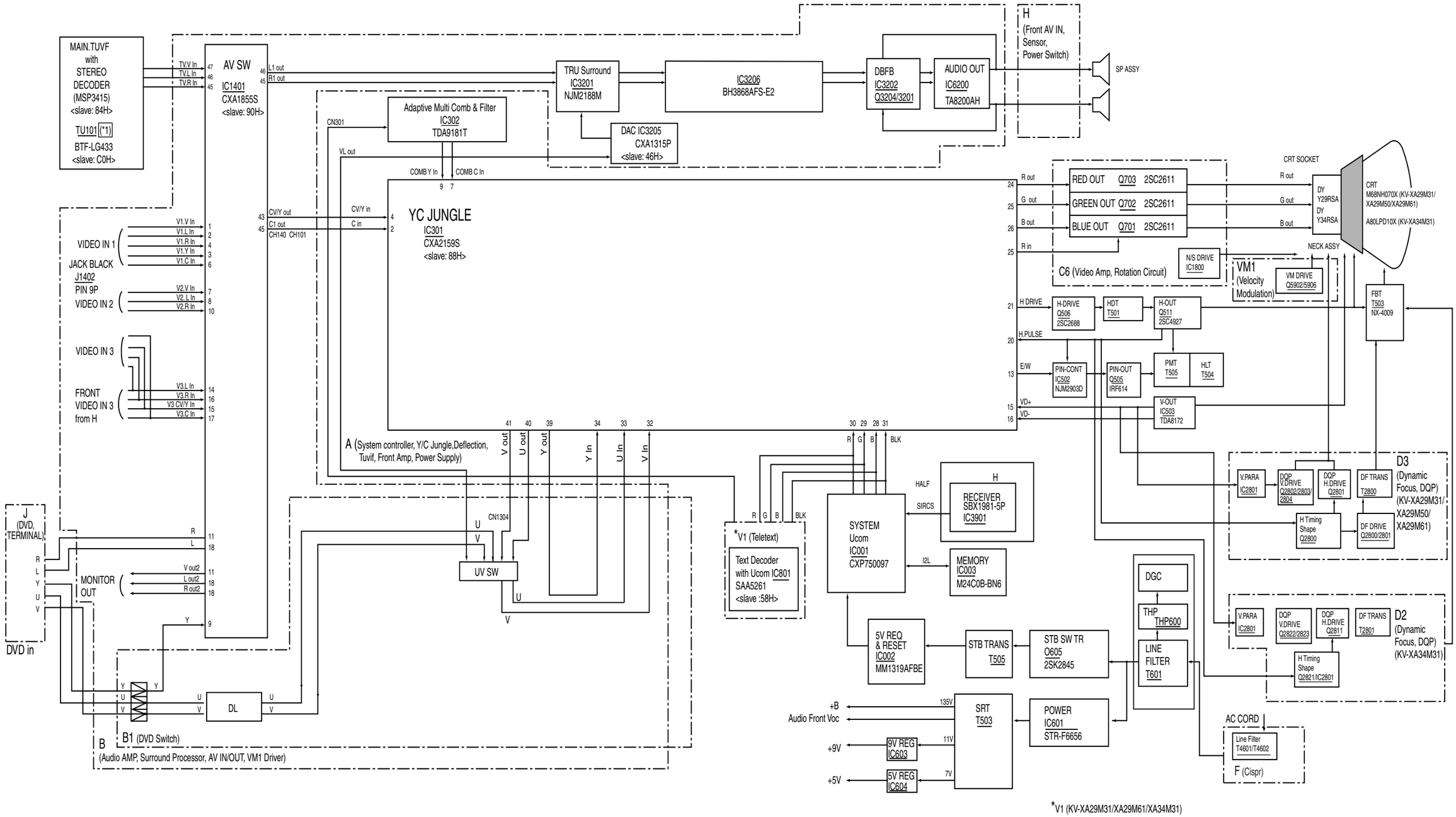
H-TRAPEZOID (DAC 4 HTR)



# SECTION 6
# DIAGRAMS

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## 6-1. BLOCK DIAGRAM



KV-XA29M31/XA29M50/
XA29M61/XA34M31
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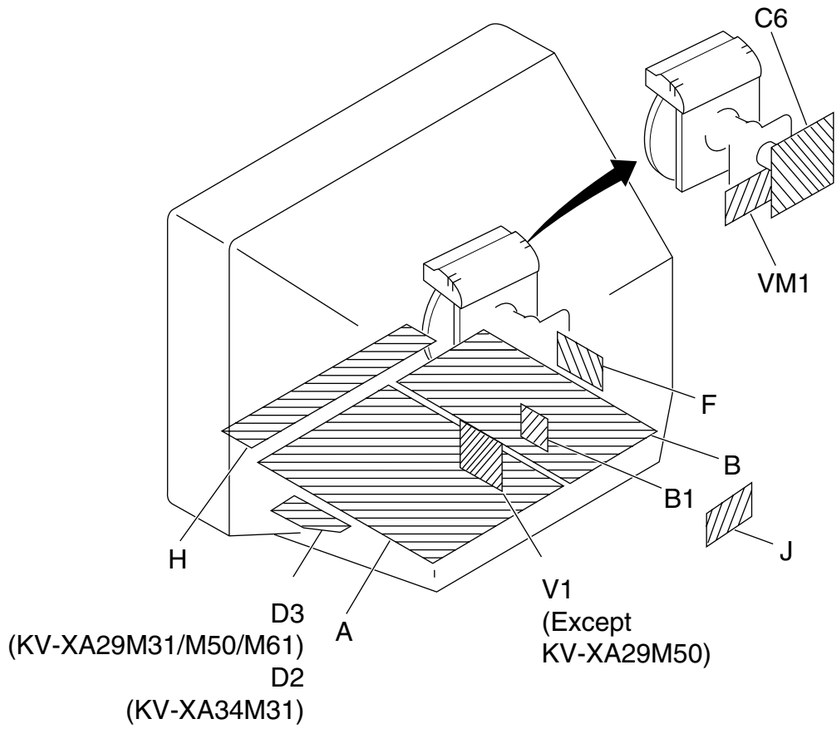
## 6-2. CIRCUIT BOARDS LOCATION






## 6-3. SCHEMATIC DIAGRAM

**Note:**

- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

- : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation or adjustment for rrepair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Redings are taken with a color-bar signal input.**
  **no mark : PAL**
  **( ) : SECAM**
  **[ ] : NTSC 3.58**
  **<< >> : NTSC 4.43**
- **Readings are taken with a 10W MW digital multimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltage are in V.**
- ✻ **: Cannot be measured.**
- **Circled numbers are waveform references.**
- **: B +bus.**
- **: B –bus.**
- ⇨ **: signal path.**

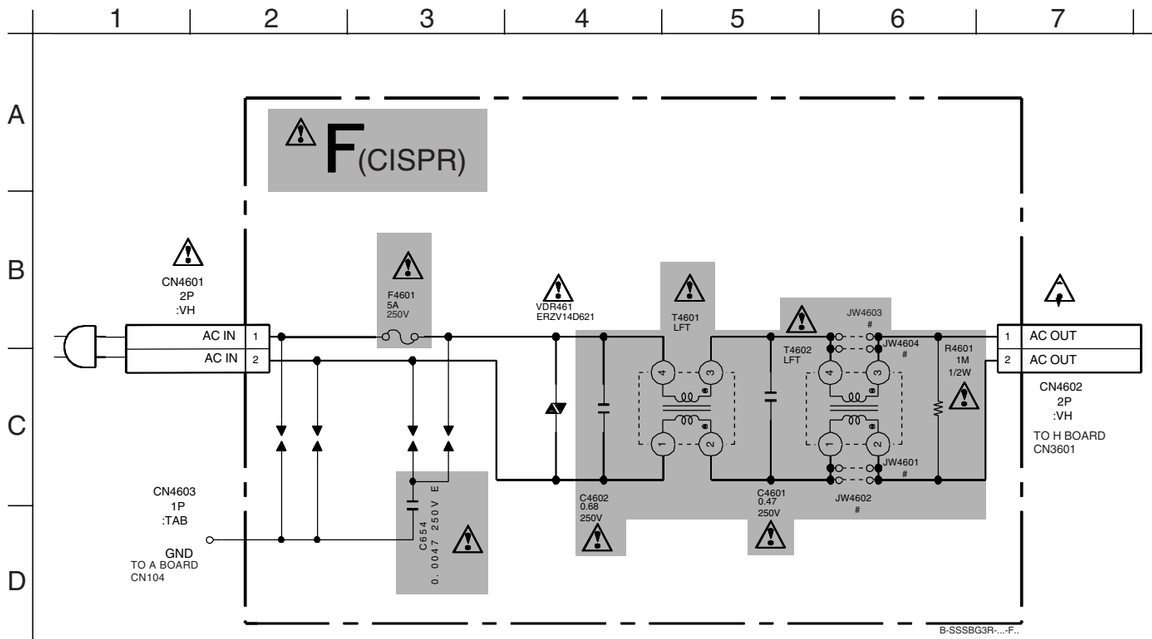
**Reference information**

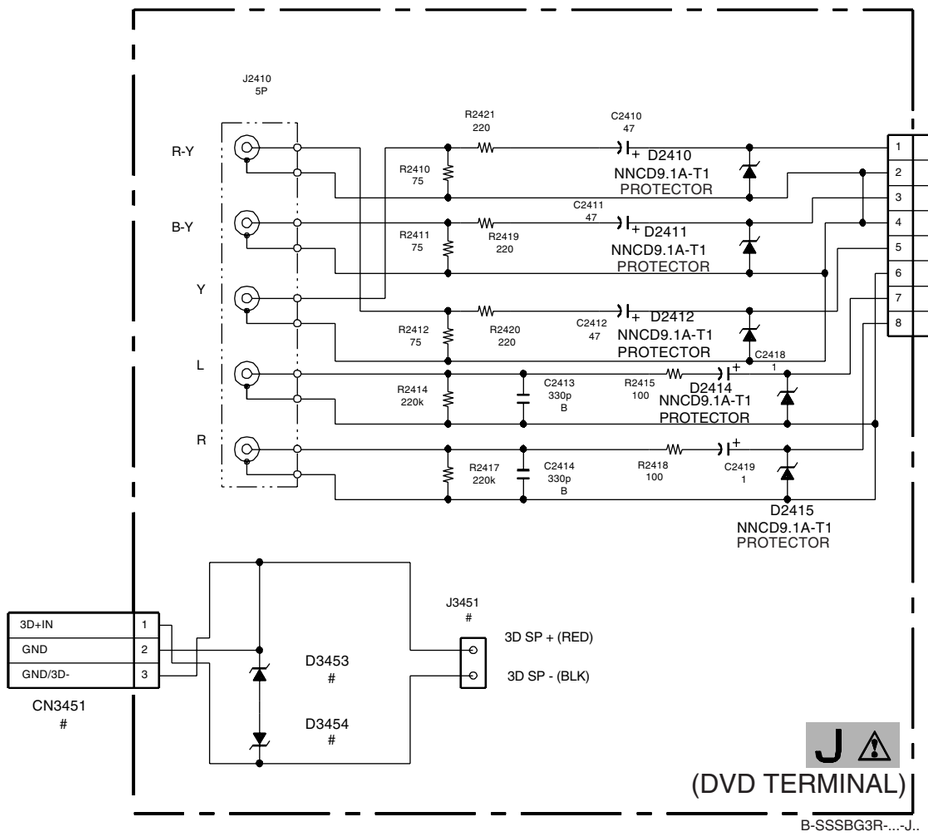
| | | |
|---|---|---|
| RESISTOR | : RN | METAL FILM |
| | : RC | SOLID |
| | : FPRD | NONFLAMMABLE CARBON |
| | : FUSE | NONFLAMMABLE FUSIBLE |
| | : RS | NONFLAMMABLE METAL OXIDE |
| | : RB | NONFLAMMABLE CEMENT |
| | : RW | NONFLAMMABLE WIREWOUND |
| | : ✻ | ADJUSTMENT RESISTOR |
| COIL | : LF-8L | MICRO INDUCTOR |
| CAPACITOR | : TA | TANTALUM |
| | : PS | STYROL |
| | : PP | POLYPROPYLENE |
| | : PT | MYLAR |
| | : MPS | METALIZED POLYESTER |
| | : MPP | METALIZED POLYPROPYLENE |
| | : ALB | BIPOLAR |
| | : ALT | HIGH TEMPERATURE |
| | : ALR | HIGH RIPPLE |

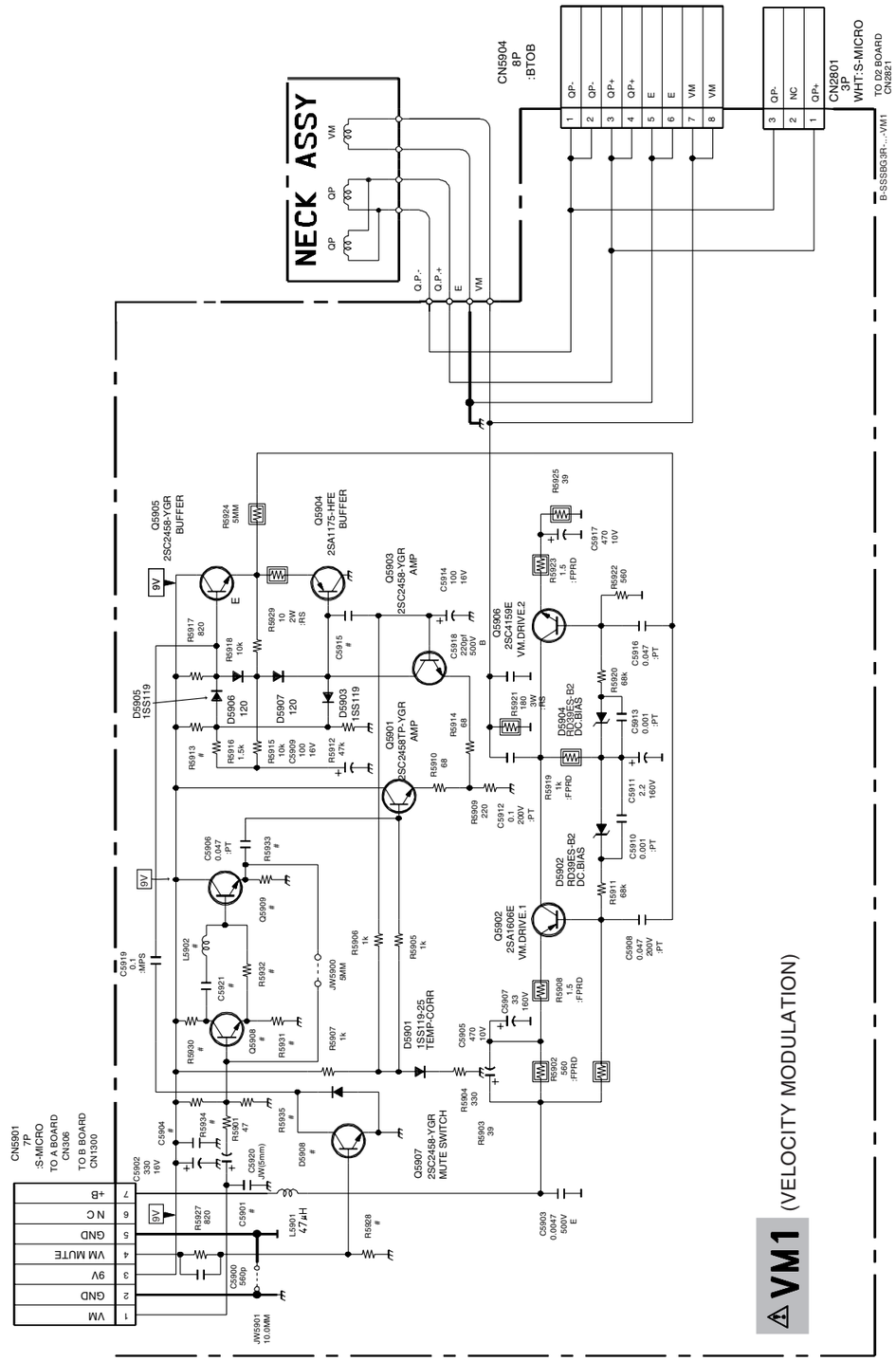
**Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## (1) Schematic Diagrams of F, J and VM1 Boards



KV-XA29M31/XA29M50/
XA29M61/XA34M31
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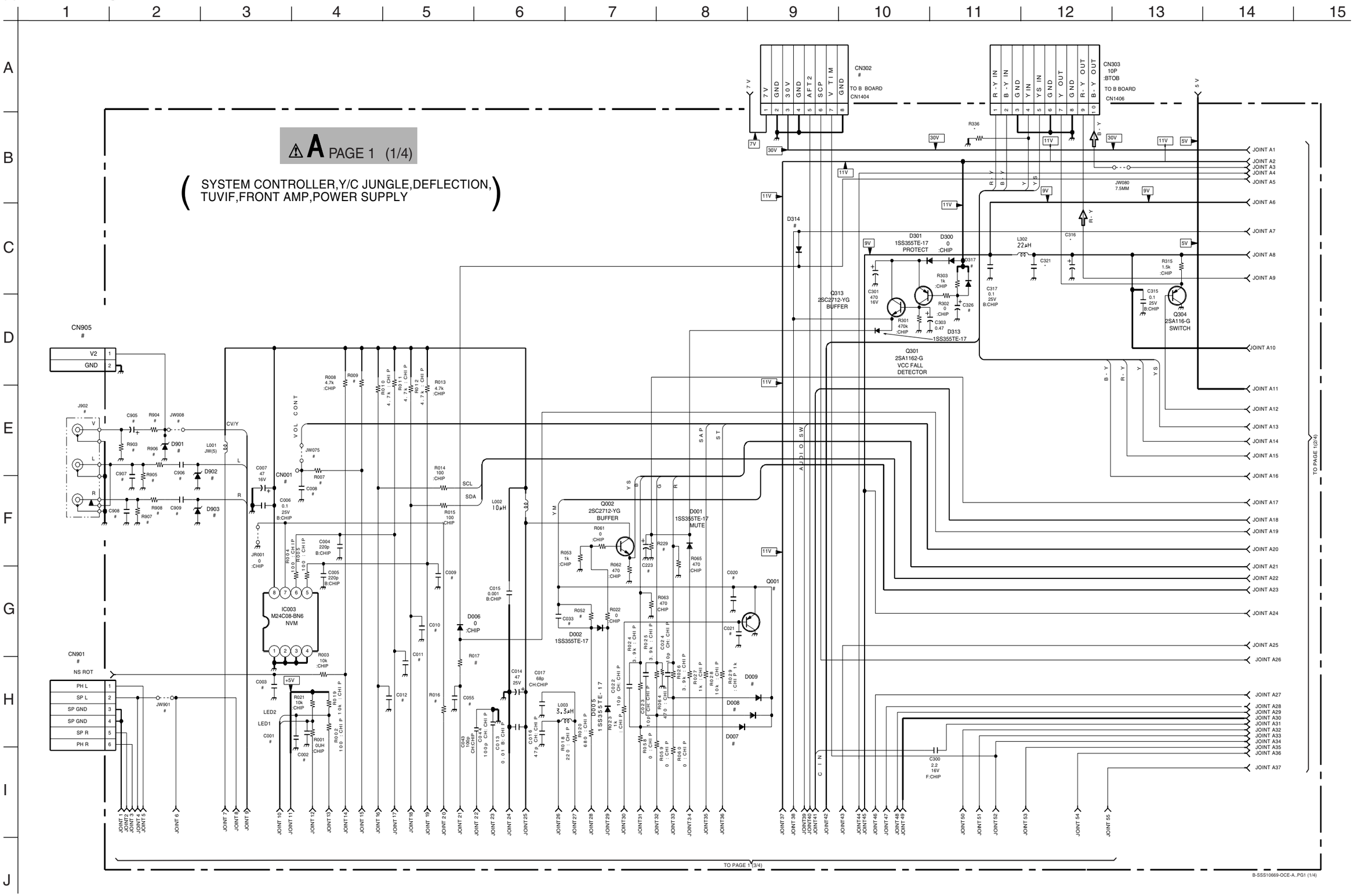
## (2) Schematic Diagram of A Board



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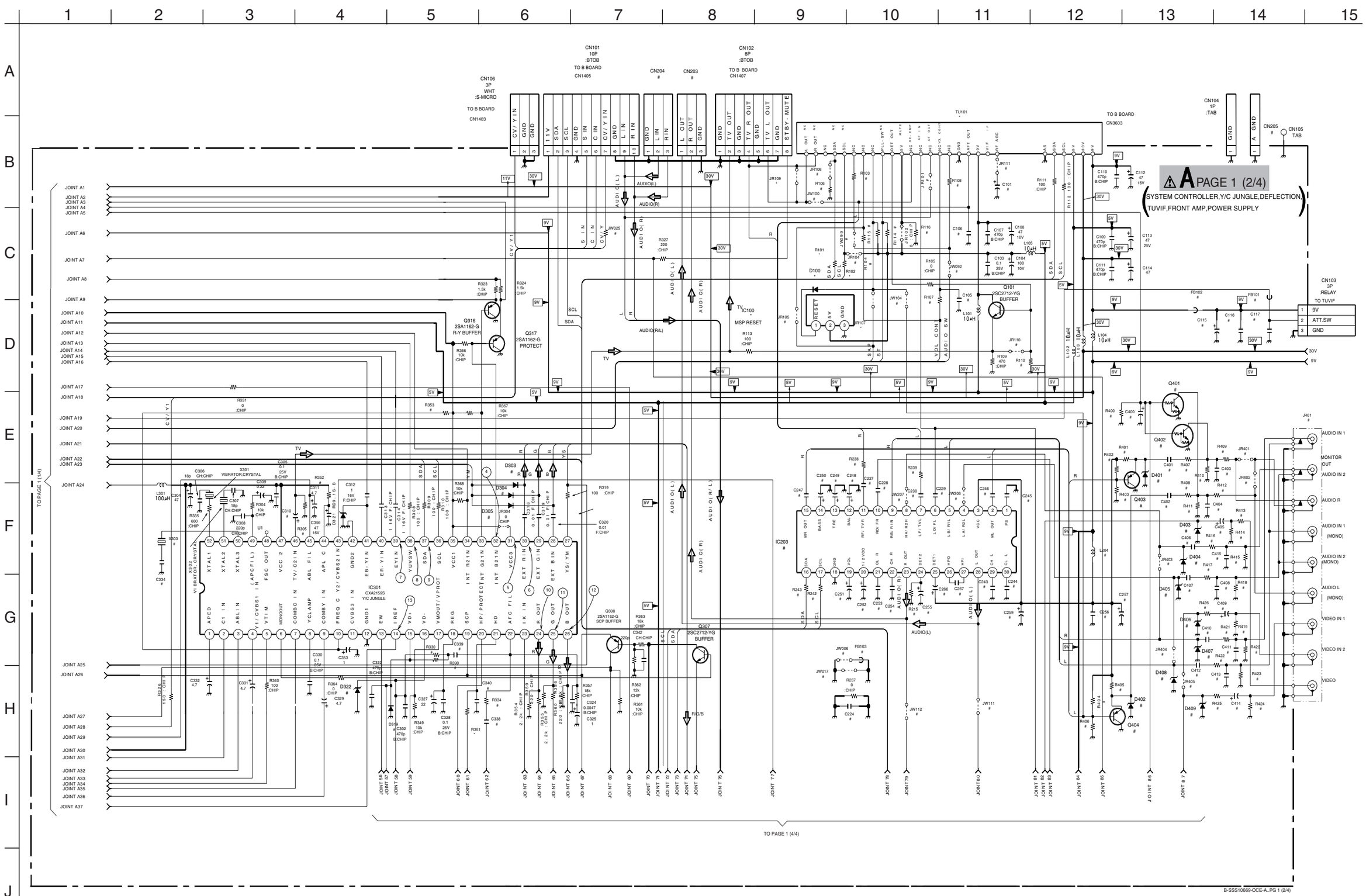

KV-XA29M31/XA29M50/
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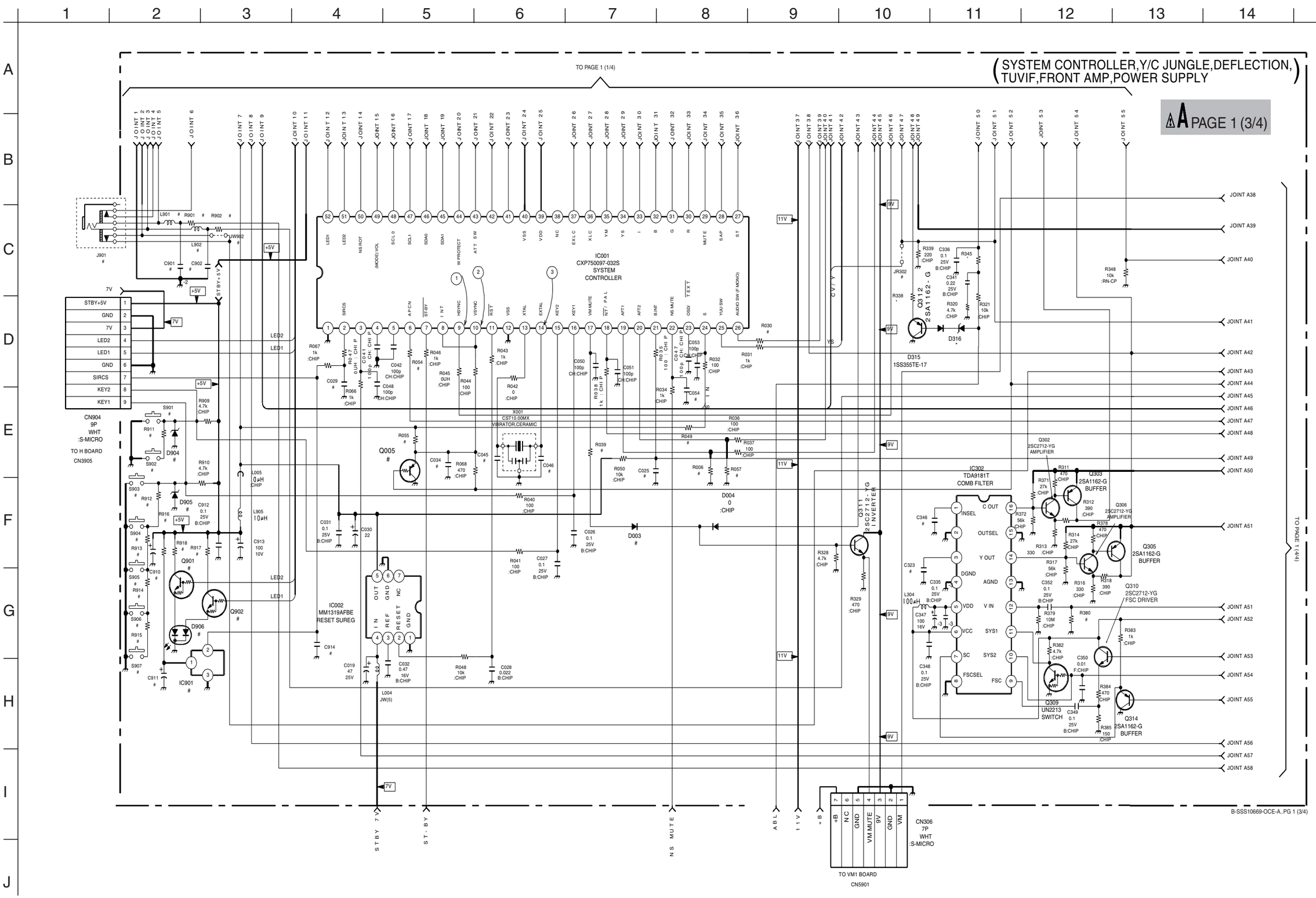

KV-XA29M31/XA29M50/
XA29M61/XA34M31
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A B C D E F G H I J

⚠ **A** PAGE 1 (1/4)

( SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,
TUVIF,FRONT AMP,POWER SUPPLY )

CN302 # TO B BOARD CN1404 — 7V GND 3.0V GND AFT2 SCP V TIM GND

R.Y IN B.Y IN GND Y IN Y/S IN GND Y OUT GND R.Y OUT

CN905 # — V2 GND

J902 # — V L R

C905 # R904 # JW008 # R903 # R906 # D901 # L001 JW(5) CV/Y
C907 # R905 # C906 # D902 # L
C908 # R907 # R908 # C909 # D903 # R

C007 47 16V
CN001 #
C006 0.1 25V B:CHIP
JR001 0 :CHIP

R008 4.7k :CHIP R009 # R010 4.7k :CHIP R011 4.7k :CHIP R012 4.7k :CHIP R013 4.7k :CHIP
VOL CONT
JW075 # R007 # C008 #

R014 100 :CHIP SCL
R015 100 :CHIP SDA

R004 100 :CHIP R005 100 :CHIP C004 220p B:CHIP C005 220p B:CHIP
IC003 M24C08-BN6 NVM
R003 10k :CHIP

C009 # C010 # C011 # C012 # C055 # R016 # R017 #

D006 0 :CHIP
D005 1SS355TE-17

L002 10μH
C015 0.001 B:CHIP
C014 47 25V
C017 68p CH:CHIP
C016 47p CH: CHI P
L003 3.3μH
R018 220 : CHI P
R020 680 : CHI P
C048 100p CH:CHIP
C013 0.01 B: CHI P
C034 100p CH: CHI P

CN901 # NS ROT

| | |
|---|---|
| PH L | 1 |
| SP L | 2 |
| SP GND | 3 |
| SP GND | 4 |
| SP R | 5 |
| PH R | 6 |

JW901 #
C003 # +5V
LED2
LED1
C001 #
R021 10k :CHIP R019 10k : CHI P
C002 # R001 0UH CHIP R02 100 : CHI P

D314 #
D301 1SS355TE-17 PROTECT
D300 0 :CHIP
L302 22μH
C316 # C321 # C317 0.1 25V B:CHIP
D317 #
R303 1k :CHIP R302 0 :CHIP C326 # C303 0.47 R301 470k :CHIP
C301 470 16V
D313 1SS355TE-17
Q313 2SC2712-YG BUFFER
Q301 2SA1162-G VCC FALL DETECTOR

R336 # — 30V 11V 9V

Q002 2SC2712-YG BUFFER
R061 0 :CHIP R053 1k :CHIP R062 470 :CHIP R229 # C223 #
D001 1SS355TE-17 MUTE
R065 470 :CHIP
R052 # C033 # R022 0 :CHIP
D002 1SS355TE-17
R063 470 CHIP
C020 # C021 # Q001 #
R024 3.9k : CHI P R025 3.9k : CHI P C024 0p CH: CHI P R026 3.9k : CHI P R027 1k : CHI P R028 10k : CHI P R029 1k : CHI P D009 # D008 # D007 #
C023 10p CH: CHI P R064 470 : CHI P C022 10p CH: CHI P R023 1k : CHI P
R058 0 : CHI P R059 0 : CHI P R060 0 : CHI P
C300 2.2 16V F:CHIP

Y S B G R — S A P — S T — A U D I O S W — Y M — C I N

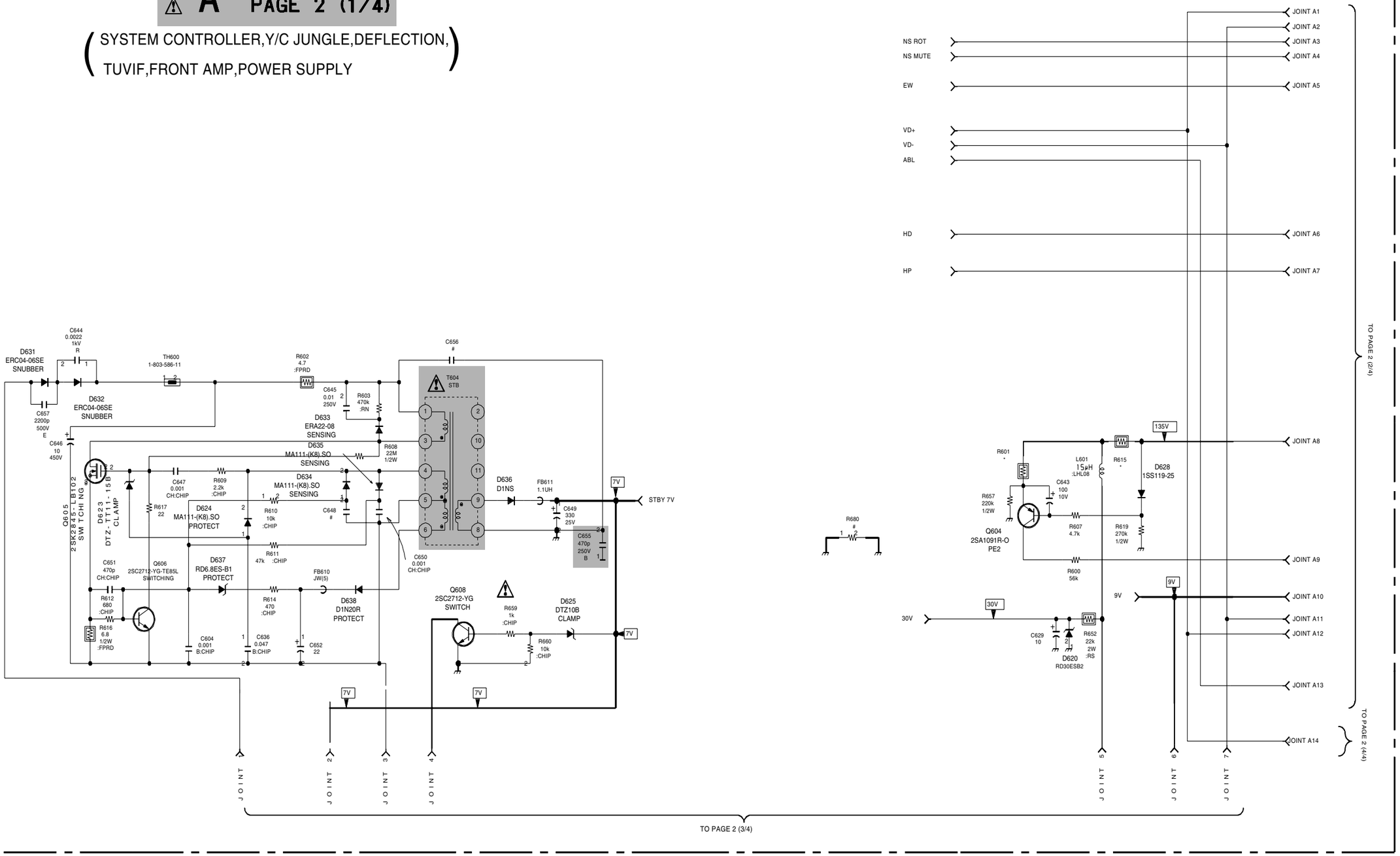
JOINT 1 JOINT2 JOINT 3 JOINT 4 JOINT 5 JOINT 6 JOINT 7 JOINT 8 JOINT 9 JOINT 10 JOINT 11 JOINT 12 JOINT 13 JOINT 14 JOINT 15 JOINT 16 JOINT 17 JOINT 18 JOINT 19 JOINT 20 JOINT 21 JOINT 22 JOINT 23 JOINT 24 JOINT25 JOINT 28 JOINT 27 JOINT 28 JOINT 29 JOINT 30 JOINT 31 JOINT 32 JOINT 33 JOINT 34 JOINT 35 JOINT 36 JOINT 37 JOINT 38 JOINT39 JOINT40 JOINT41 JOINT 42 JOINT 43 JOINT44 JOINT45 JOINT 46 JOINT 47 JOINT 48 JOINT 49 JOINT 50 JOINT 51 JOINT 52 JOINT 53 JOINT 54

TO PAGE 1 (3/4)

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

# ⚠ A PAGE 2 (1/4)

( SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,
TUVIF,FRONT AMP,POWER SUPPLY )




B-SSS10669-OCE.PG 2(1/4)

KV-XA29M31/XA29M50/
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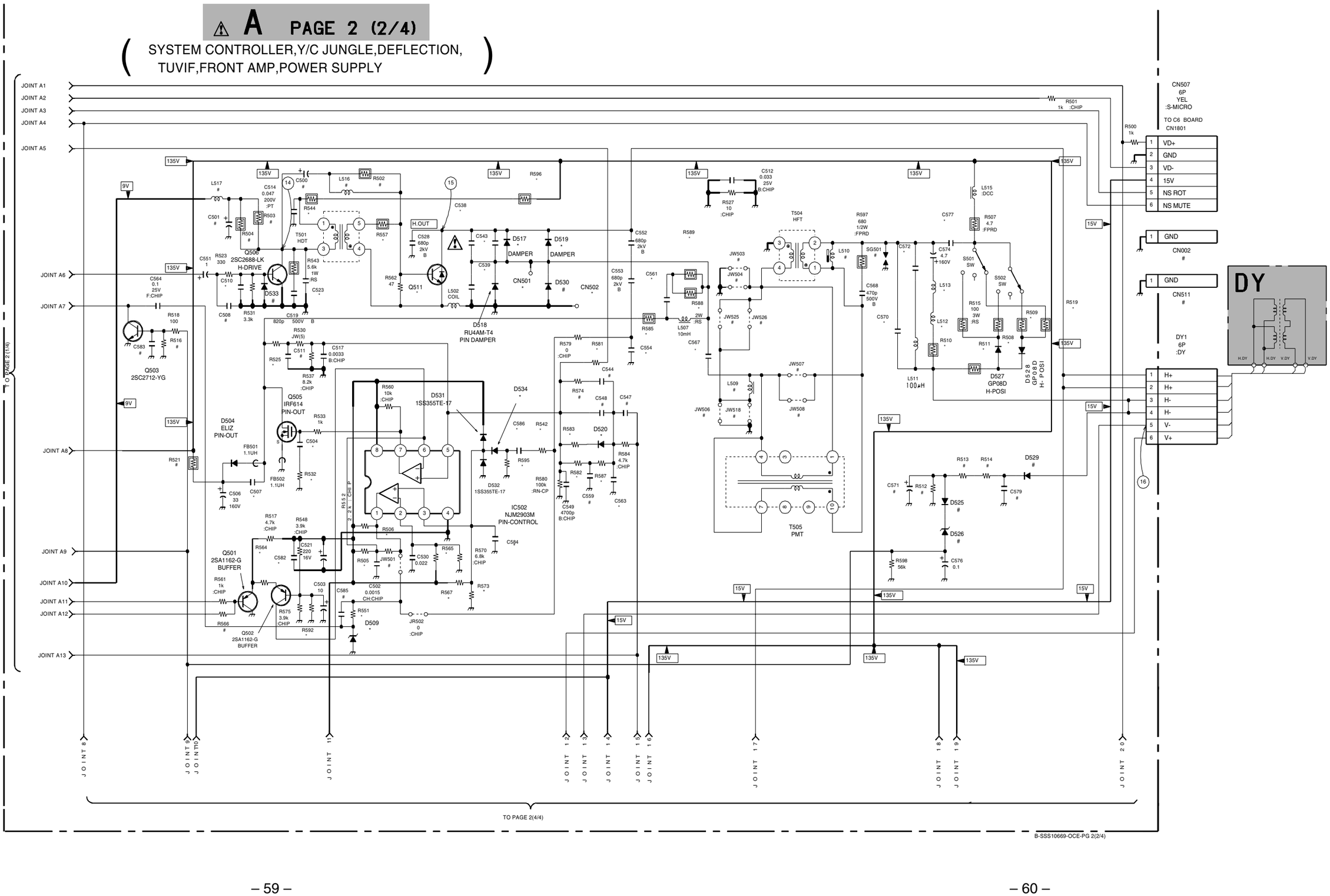
RM-954

# ⚠ A PAGE 2 (2/4)

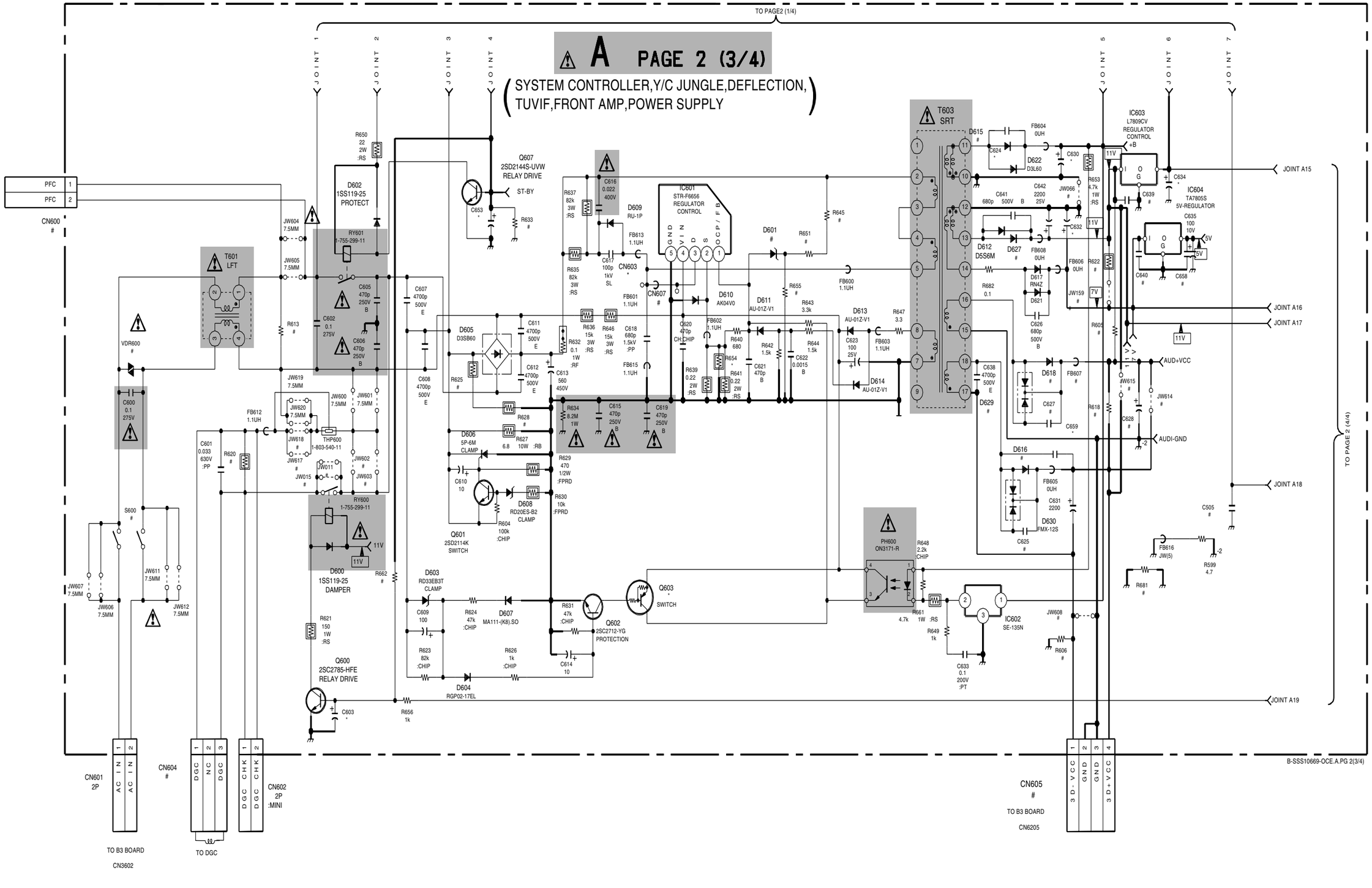
( SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,
TUVIF,FRONT AMP,POWER SUPPLY )



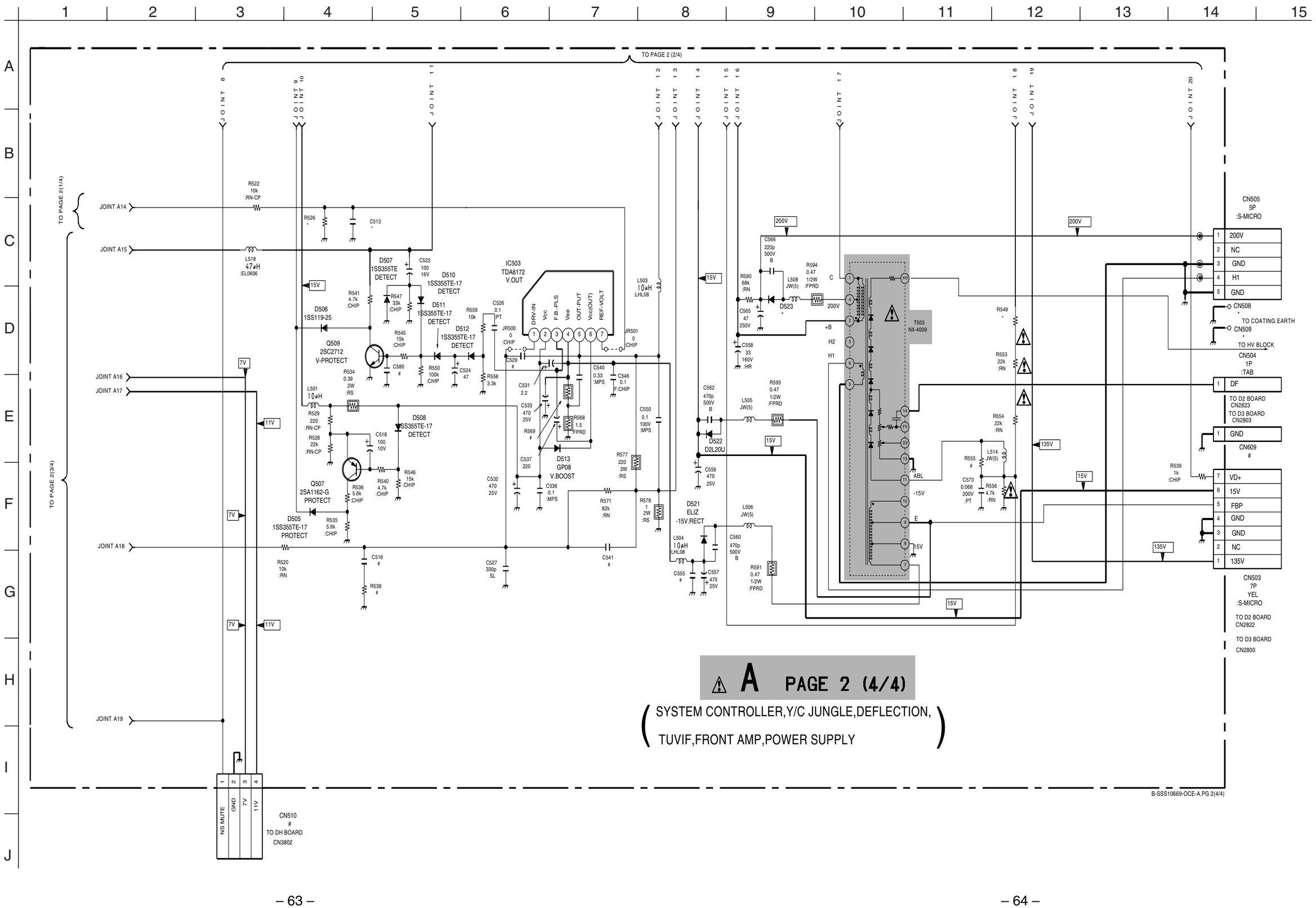
KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

# ⚠A PAGE 2 (3/4)

(SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,
TUVIF,FRONT AMP,POWER SUPPLY)



KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

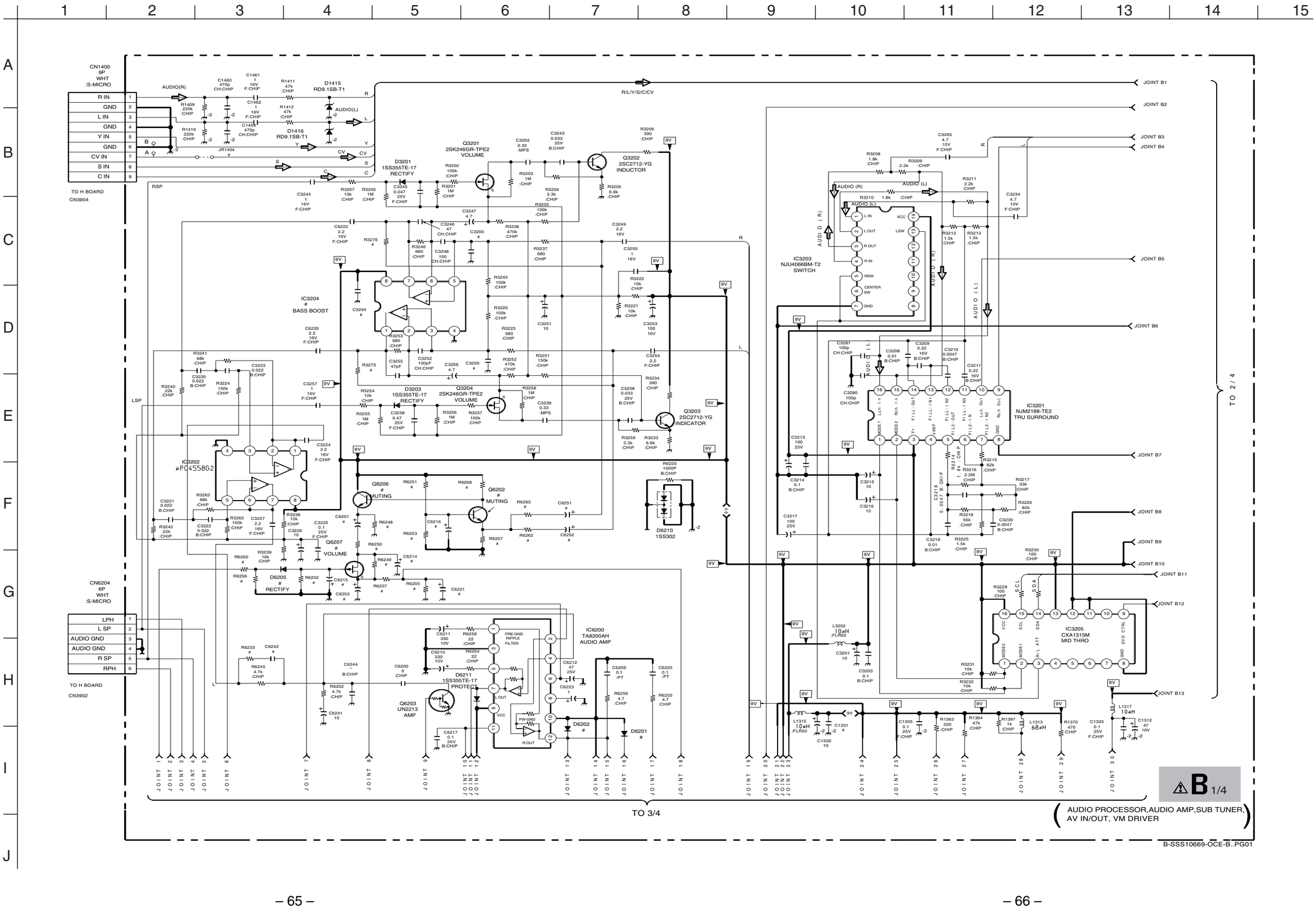



## ⚠ A PAGE 2 (4/4)

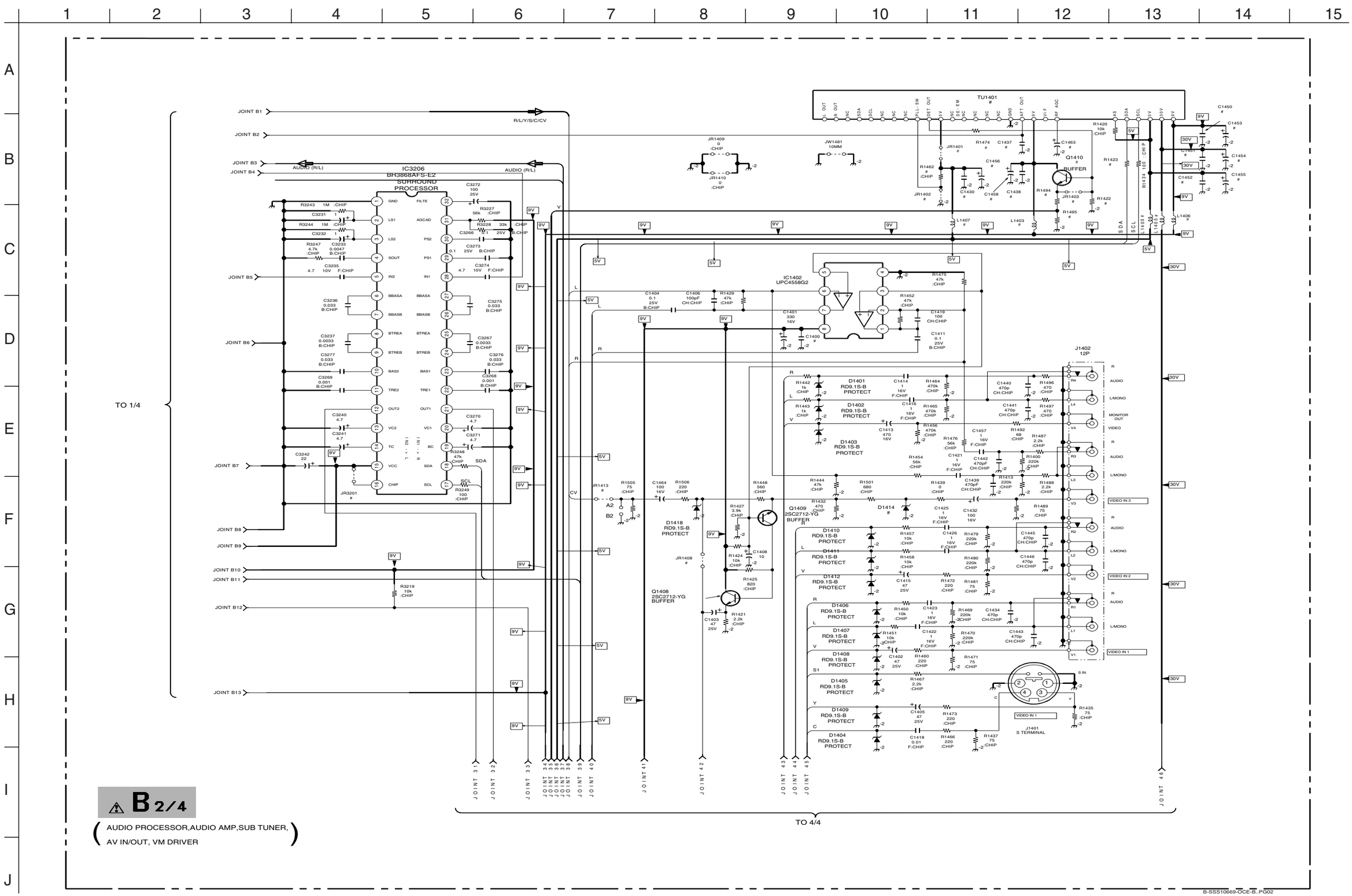
( SYSTEM CONTROLLER,Y/C JUNGLE,DEFLECTION,
TUVIF,FRONT AMP,POWER SUPPLY )

B-SSS10669-OCE-A.PG 2(4/4)

## (3) Schematic Diagram of B Board



KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954




B 2/4

( AUDIO PROCESSOR,AUDIO AMP,SUB TUNER,
AV IN/OUT, VM DRIVER )

B-SSS10669-OCE-B..PG02

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

B 3/4

AUDIO PROCESSOR,
AUDIO AMP,SUB TUNER,
AV IN/OUT, VM DRIVER

TO 1/4

TO 4/4

B-SSS10669-OCE-B..PG03

CN6200
4P
YEL
:S-MICRO
AUDI GND 1
AUDI GND 2
AUDI +VCC 3
AUDI +VCC 4
TO A BOARD
CN608

CN6202
#
W OUT 1
W OUT 2
GND 3
GND 4
TO H BOARD
CN3903

IC6201
#
3D AMP

Q6208 UN2213 AMP
Q6204 UN2213 AMP
Q6201 UN2213 AMP
Q6214 # AMP

D6212 1SS355TE-17 PROTECT
D6200 # PROTECTOR
Q6200 # MUTING
Q6205 #

Q1316 2SA1162 AMPLIFIER
Q1317 2SC2712 BUFFER
Q1323 2SC2712 AMPLIFIER
Q1324 2SC2712 PEAKING AMP
Q1318 2SC2712 AMPLIFIER
Q1372 2SC2712 DELAY BUFFER

IC3200 μPC4558G2 AUDIO MIXER
IC1403 L7805CV REGULATOR
IC1404 NJM78M09FA REGULATOR

JOINT B14
JOINT B15
JOINT B16
JOINT B17
JOINT B18
JOINT B19
JOINT B20
JOINT B21
JOINT B22
JOINT B23
JOINT B24
JOINT B25
JOINT B26
JOINT B27
JOINT B28
JOINT B29

CN6205
#
TO A BOARD
CN605

CN6206
5P
WHT
:S-MICRO
TO A BOARD
CN201

CN1300
3P

CN1404
#
TO A BOARD
CN302

CN1405
10P
WHT
:BTOB
TO A BOARD
CN101

CN1406
10P
TO A BOARD
CN303

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

TO 2/4

TO 3/4

JOINT B14
JOINT B15
JOINT B16
JOINT B17
JOINT B18
JOINT B19
JOINT B20
JOINT B21
JOINT B22
JOINT B23
JOINT B24
JOINT B25
JOINT B26
JOINT B27
JOINT B28
JOINT B29

R1372 470 :CHIP
R1301 470 :CHIP
R1350 33k :CHIP
L1314 10μH
Q1365 2SC2712 BUFFER
C1395 82p CH:CHIP
R1347 100 :CHIP
R1345 470 :CHIP
R1346 470 :CHIP
R1320 22k :CHIP
C3229 10 25V :BP

IC1401 CXA1855S AV SWITCH

Q1401 #
Q1402 2SA1162 BUFFER
Q1403 2SC2712 BUFFER
Q1404 2SC2712 BUFFER
D1413 #

AUDIO (R/L)
TV/R/L
JR1412 #
JW1400 5MM

CN1407 8P WHT :BTOB
TO A BOARD CN102

CN1408 # TO P2 BOARD

CN1409 10P WHT: BTOB

CN1403 3P WHT :S-MICRO
TO A BOARD CN106

CN1401 1P
TO A BOARD CN105

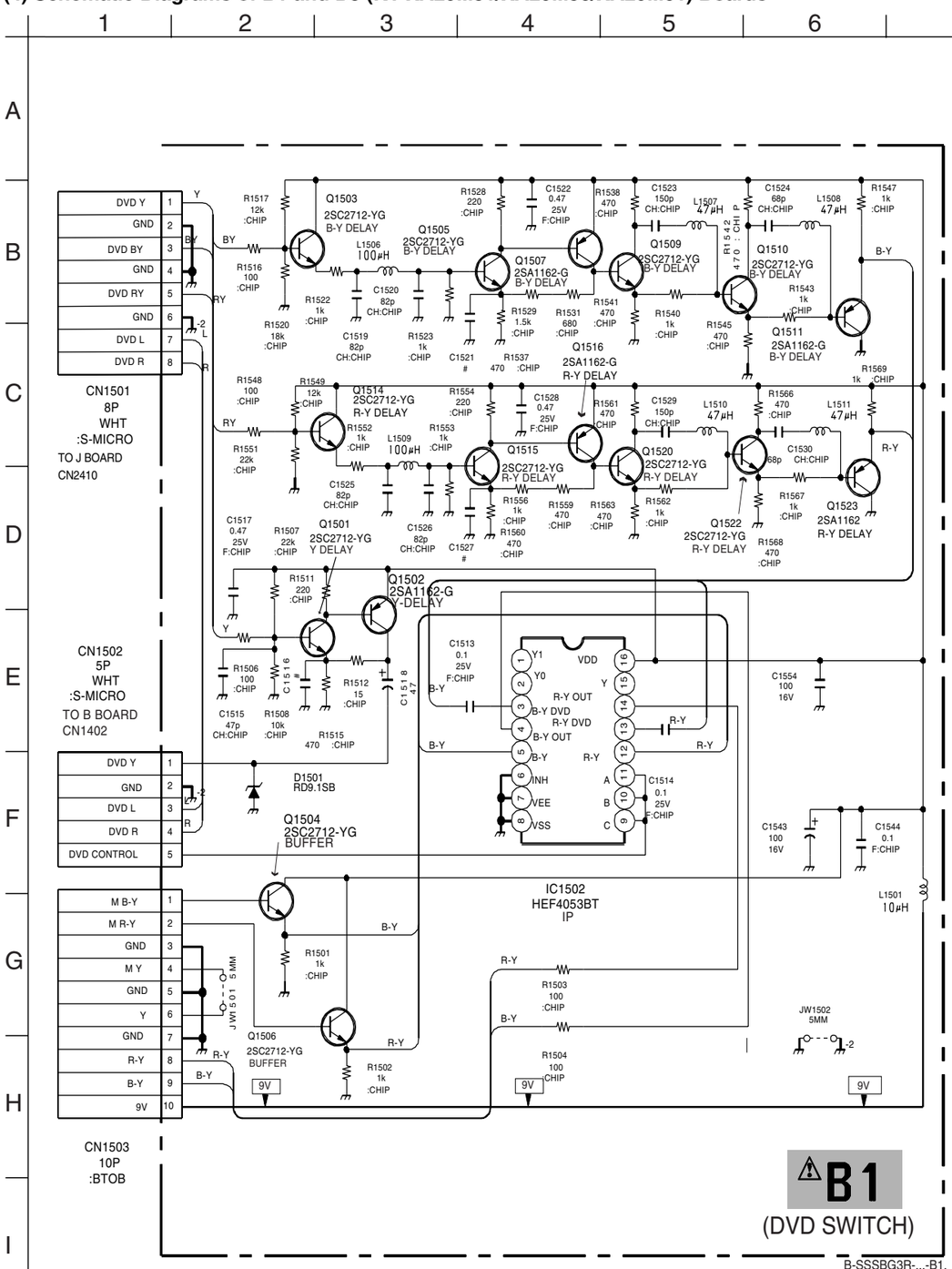
CN1402 #

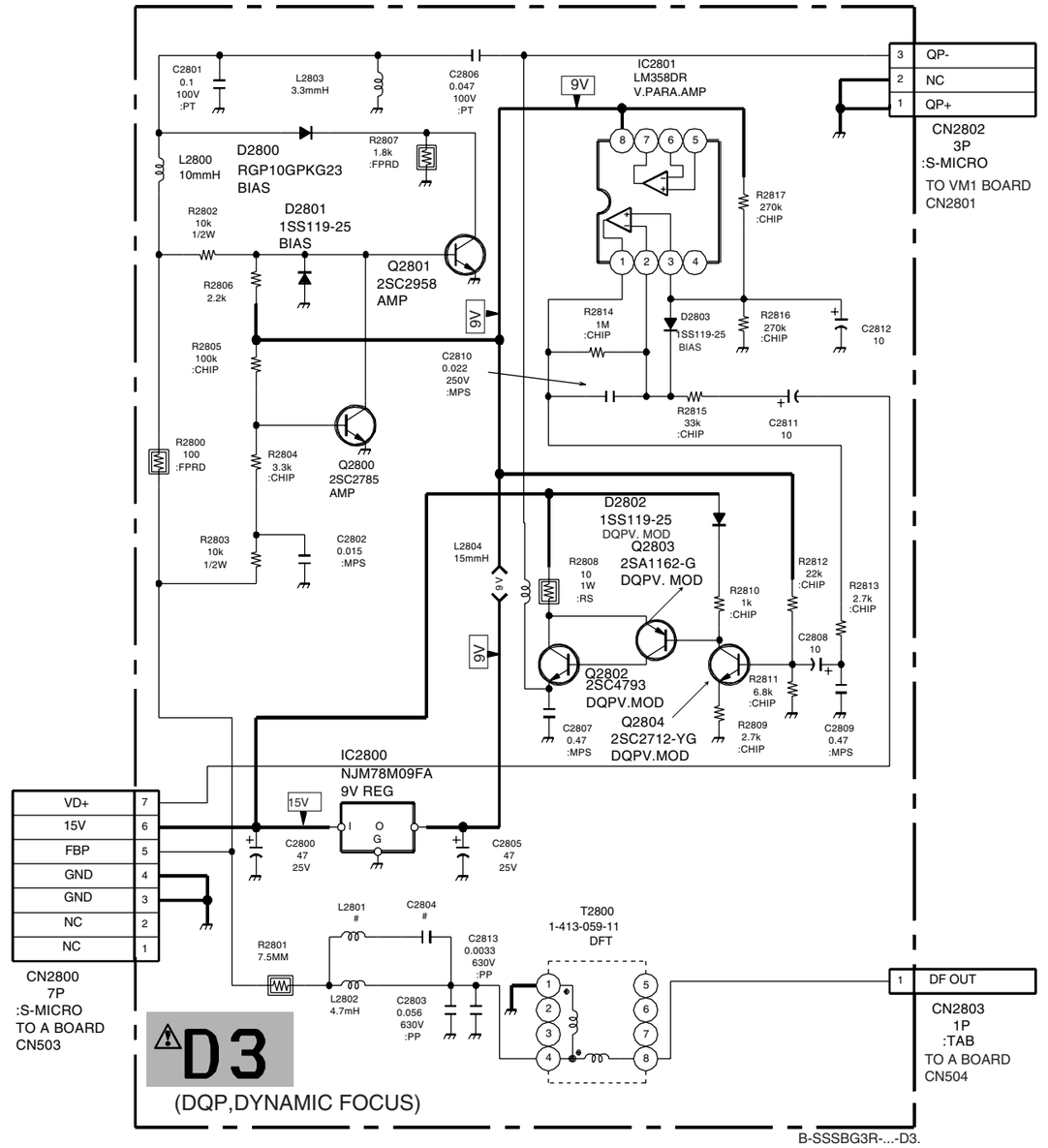
B 4/4
(AUDIO PROCESSOR,AUDIO AMP,SUB TUNER, AV IN/OUT, VM DRIVER)

B-SSS10669-OCE-B..PG04

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

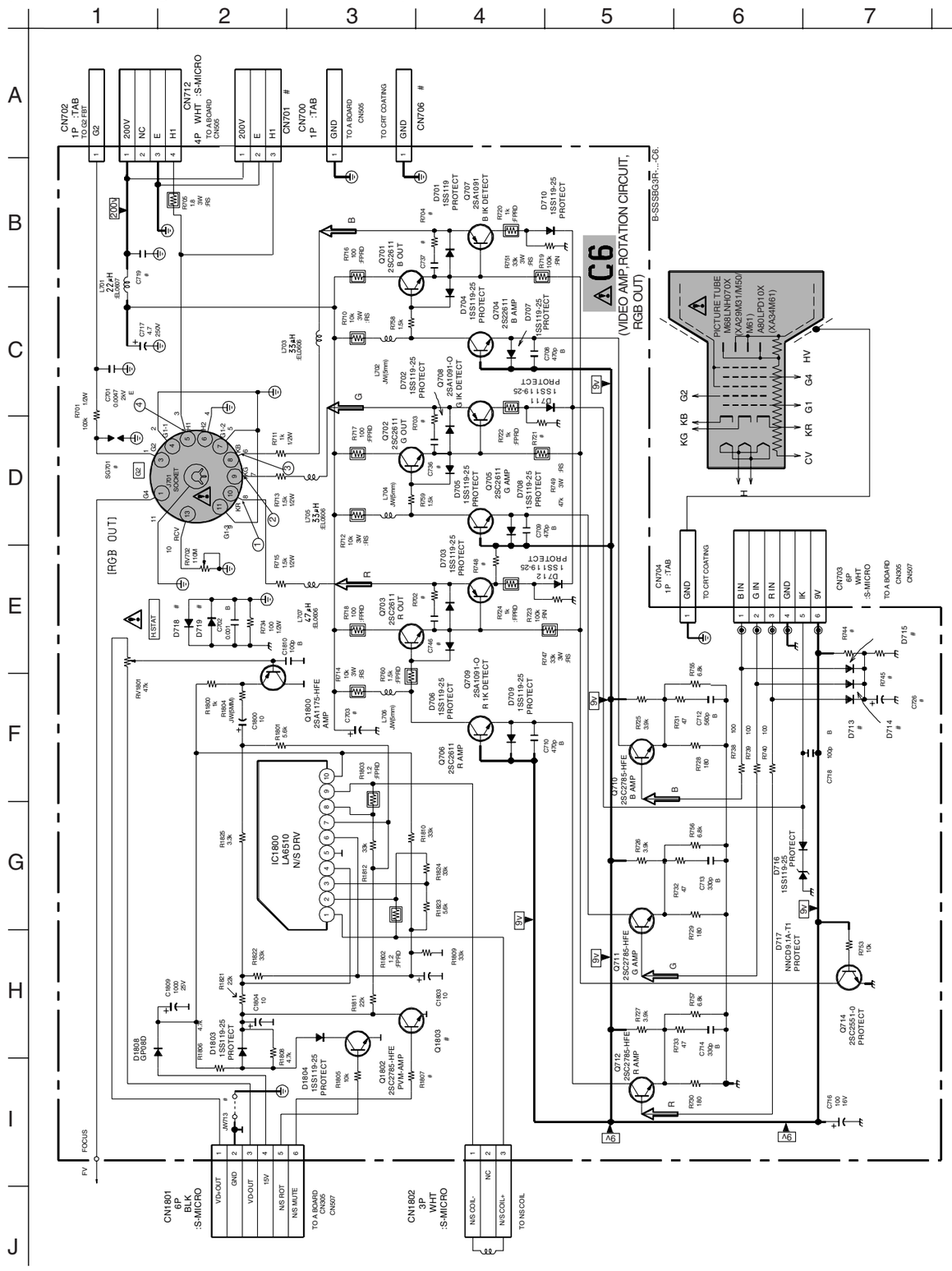
## (4) Schematic Diagrams of B1 and D3 (KV-XA29M31/XA29M50/XA29M61) Boards

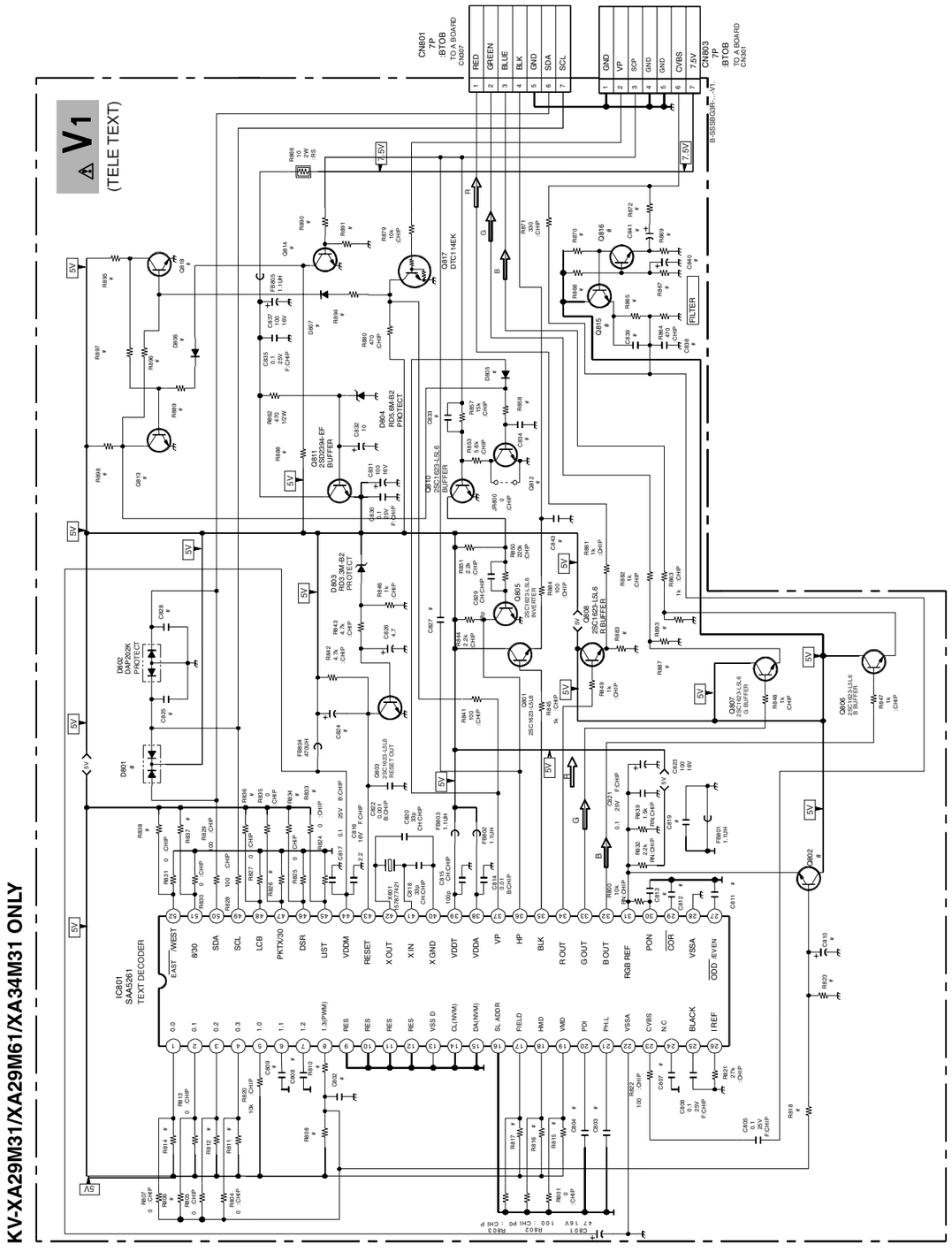


KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## (5) Schematic Diagrams of C6 and V1 Boards (KV-XA29M31/XA29M61/XA34M31)

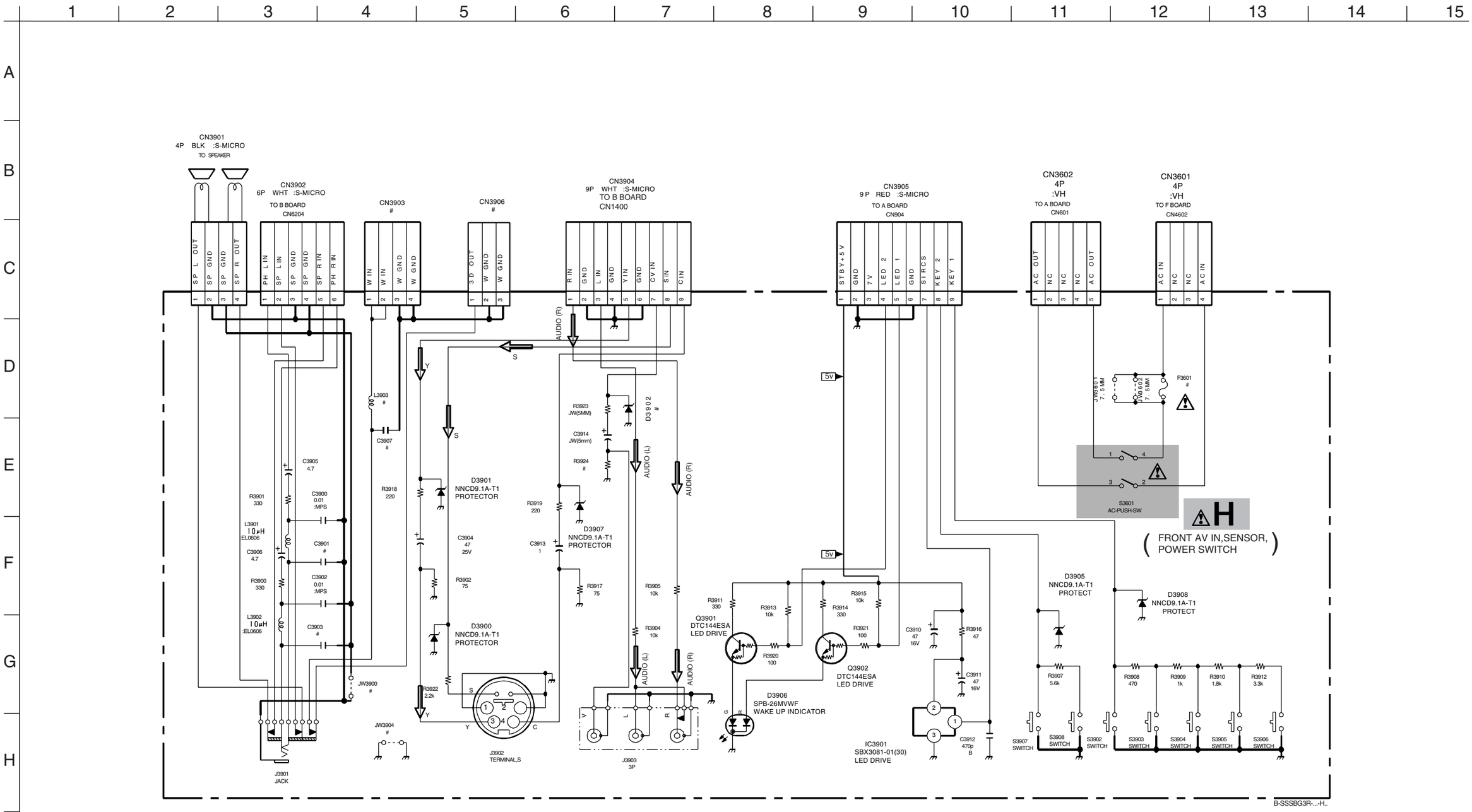



KV-XA29M31/XA29M61/XA34M31 ONLY

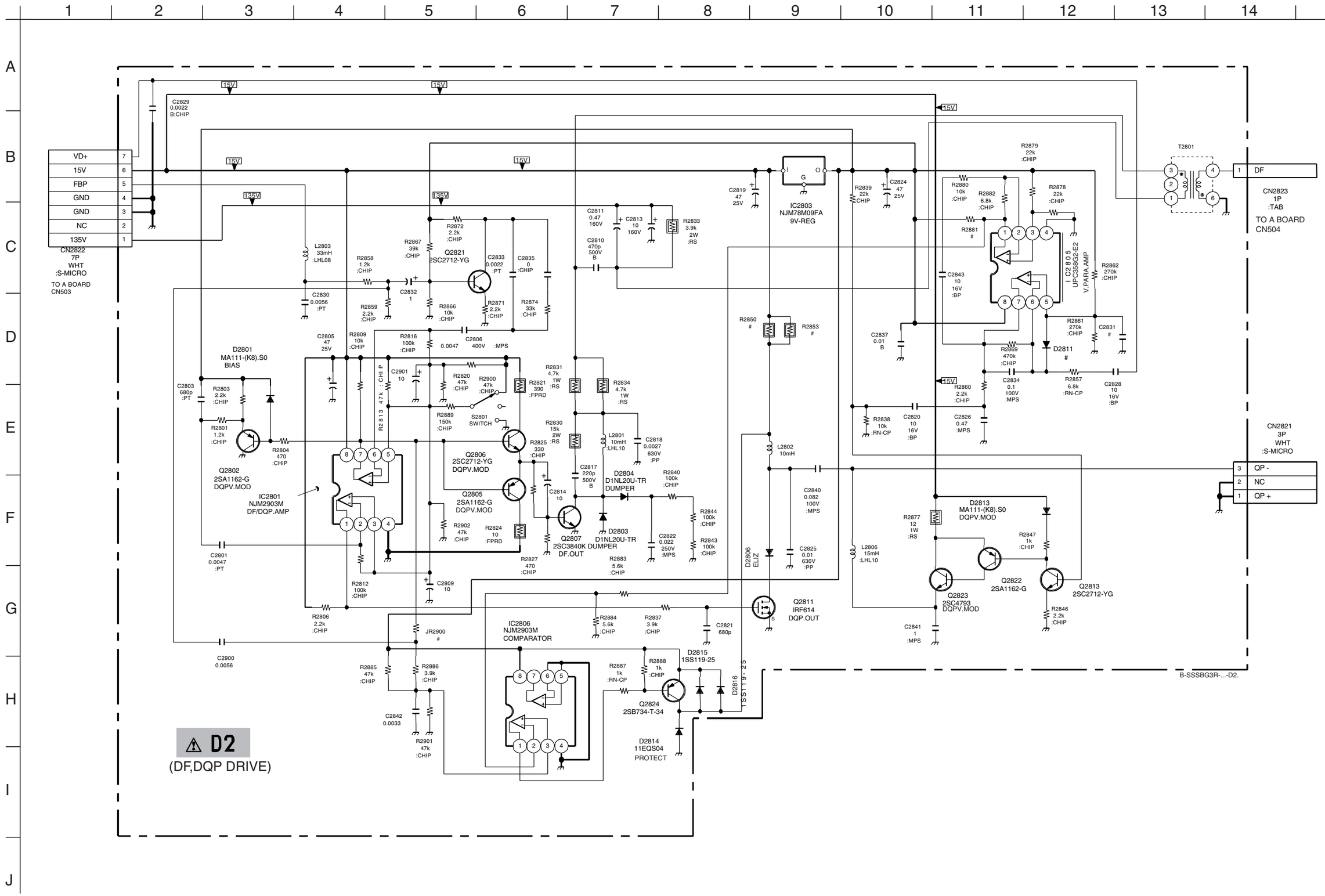
KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## (6) Schematic Diagram of H Board



KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## (7) Schematic Diagram of D2 Board (KV-XA34M31)



KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## 6-4 A AND B BOARD ✻ MARK LIST

### A BOARD

| | KV-XA29M31 | KV-XA29M50 | KV-XA29M61 | KV-XA34M31 |
|---|---|---|---|---|
| C316 | 220 | 220 | 200 | 47 |
| C321 | 0.22 :CHIP | 0.22 :CHIP | 0.22 :CHIP | # |
| C504 | # | # | # | 680P :CHIP |
| C507 | 4700P | 4700P | 4700P | 220P :CHIP |
| C510 | 330P :CHIP | 330P | 330P | 0.001 :CHIP |
| C513 | 330P :CHIP | 330P | 330P | 0.01 :CHIP |
| C523 | 680P :CHIP | 680P :CHIP | 680P :CHIP | 1000P :CHIP |
| C538 | 0.019 :PP | 0.019 :PP | 0.019 :PP | 0.023 :PP |
| C539 | 0.056 :PP | 0.056 :PP | 0.056 :PP | 0.051 :PP |
| C543 | # | # | # | 680P :CHIP |
| C554 | 0.0047 :PT | 0.0047 :PT | 0.0047 :PT | 0.0056 :PT |
| C561 | 0.0022 :PP | 0.0022 :PP | 0.0022 :PP | 0.0027 :PP |
| C563 | 0.1 :CHIP | 0.1 :CHIP | 0.1 :CHIP | 0.01 :CHIP |
| C567 | 0.68 :PP | 0.68 :PP | 0.68 :PP | 0.75 :PP |
| C570 | 1.0 :PP | 1.0 :PP | 1.0 :PP | 1.8 :PP |
| C572 | 0.15 :PP | 0.15 :PP | 0.15 :PP | 0.22 :PP |
| C577 | 0.15 :PP | 0.15 :PP | 0.15 :PP | 0.23 :PP |
| C582 | 0.1 :PP | 0.1 :PP | 0.1 :PP | # |
| C584 | 100P :CHIP | 100P :CHIP | 100P :CHIP | # |
| C586 | 100P :CHIP | 100P :CHIP | 100P :CHIP | 0 :CHIP |
| C624 | 2200P | 2200P | 2200P | 1500P |
| C630 | 100 | 100 | 100 | 560 |
| C632 | 2200 | 2200 | 2200 | 3300 |
| C634 | 100 | 100 | 100 | 220 |
| C659 | 680P :CHIP | 680P :CHIP | 680P :CHIP | 330P :CHIP |
| CN301 | 7P | # | 7P | 7P |
| CN307 | 7P | # | 7P | 7P |
| CN501 | 1P | 1P | 1P | # |
| CN502 | 1P | 1P | 1P | # |
| CN508 | # | # | # | 1P :TAB |
| CN509 | # | # | # | 1P :TAB |
| CN510 | # | # | # | 4P |
| D100 | 1SS355TE-17 | # | 1SS355TE-17 | 1SS355TE-17 |
| D315 | # | # | # | 1SS355TE-17 |
| D316 | RD7.5SB1-T1 | RD7.5SB1-T1 | RD7.5SB1-T1 | RD9.1S-B |
| D509 | 10K :CHIP | 10K :CHIP | 10K :CHIP | RD5.6S-B |
| D517 | RS3FS | RS3FS | RS3FS | ERC06-15S |
| D519 | RS3FS | RS3FS | RS3FS | ERC06-15S |
| D520 | # | # | # | 1SS355TE-17 |
| D521 | EL1Z | EL1Z | EL1Z | D2L20U |
| D523 | EL1Z | EL1Z | EL1Z | D2L20U |
| D534 | 1SS355TE-17 | 1SS355TE-17 | 1SS355TE-17 | 0 :CHIP |
| IC100 | S-80743 AL-47-S | # | S-80743 AL-47-S | S-80743 AL-47-S |
| JR107 | 0 :CHIP | # | 0 :CHIP | 0 :CHIP |
| JR109 | # | 0 :CHIP | # | # |
| JR400 | # | # | # | 0 :CHIP |
| JW100 | # | 15.0 MM | # | # |
| L512 | # | # | # | 1MMH |
| L513 | 1.5MMH | 1.5MMH | 1.5MMH | 1MMH |
| Q511 | 2SD2578-CA | 2SD2578-CA | 2SD2578-CA | 2SC4927-01 |
| Q603 | UN2111 | UN2111 | UN2111 | DTA114EKA-T146 |
| R028 | 10K :CHIP | # | 10K :CHIP | 10K :CHIP |
| R101 | 100 :CHIP | # | 100 :CHIP | 100 :CHIP |
| R102 | 100 :CHIP | # | 100 :CHIP | 100 :CHIP |
| R336 | # | # | # | 1K :CHIP |
| R345 | 22K :CHIP | 22K :CHIP | 22K :CHIP | 10K :CHIP |
| R350 | 3.3K :CHIP | 3.7K :CHIP | 3.3K :CHIP | 2.2K :CHIP |
| R351 | 1.5K :CHIP | 1.5K :CHIP | 1.5K :CHIP | 1.0K :CHIP |
| R375 | 100 :CHIP | # | 100 :CHIP | 100 :CHIP |
| R505 | 100K :CHIP | 100K :CHIP | 100K :CHIP | 470K :CHIP |
| R506 | 22K :CHIP | 22K :CHIP | 22K :CHIP | 18K :CHIP |
| R508 | 27 :RS | 27 :RS | 27 :RS | 47 :RS |
| R509 | 56 :RS | 56 :RS | 56 :RS | 82 :RS |
| R510 | 56 :RS | 56 :RS | 56 :RS | 39 :RS |
| R511 | 33 :RS | 33 :RS | 33 :RS | 6.8 :RS |
| R515 | 100 :RS | 100 :RS | 100 :RS | 1.0 :RS |
| R519 | 220 :RS | 220 :RS | 220 :RS | 12 :RS |
| R525 | 470 :CHIP | 470 :CHIP | 470 :CHIP | IM :CHIP |
| R526 | 8.2K :CHIP | 8.2K :CHIP | 8.2K :CHIP | 7.5K :CHIP |
| R532 | # | # | # | 10K :CHIP |
| R542 | 10K :CHIP | 10K :CHIP | 10K :CHIP | 100K :CHIP |
| R544 | 1K :RS | 1K :RS | 1K :RS | 820 :RS |
| R549 | 20K :RN | 20K : RN | 20K :RN | 18K :RN |
| R551 | 100K | 2.2K | 100K | 2.2K |
| R557 | # | # | # | 0.22 :RS |
| R564 | 39K :CHIP | 39K :CHIP | 39K :CHIP | 47K :CHIP |
| R565 | 10K :CHIP | 10K :CHIP | 10K :CHIP | 3.3K :CHIP |
| R567 | 220K :CHIP | 220K :CHIP | 220K :CHIP | # |
| R571 | 8.2K :RN | 8.2K :RN | 8.2K :RN | 7.5K :RN |
| R573 | 27K :CHIP | 27K :CHIP | 27K :CHIP | # |
| R581 | 2.2K :CHIP | 2.2K :CHIP | 2.2K :CHIP | 4.7K :CHIP |
| R582 | # | # | # | 0 :CHIP |
| R583 | # | 1.5M :CHIP | # | 1.5M :CHIP |
| R585 | 2.2 | 2.2 | 2.2 | 1.0 |
| R587 | 47K :CHIP | 47K :CHIP | 47K :CHIP | 620K :CHIP |
| R588 | 220 :RS | 220 :RS | 220 :RS | 100 :RS |
| R589 | 220 :RS | 220 :RS | 220 :RS | 100 :RS |
| R592 | 39K :CHIP | 39K :CHIP | 39K :CHIP | 100K :CHIP |
| R595 | 10K :CHIP | 10K :CHIP | 10K :CHIP | # |
| R596 | 680 :RS | 680 :RS | 680 :RS | 820 :RS |
| R601 | 1.8K | 1.8K | 1.8K | 1K |
| R615 | 1.0 :RS | 1.0 :RS | 1.0 :RS | 0.56 :RS |
| R654 | # | # | # | 1.0 :RS |
| TU101 | BTF-WG441 | BTF-LG433 | BTF-WG441 | BTF-WG441 |

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

### B BOARD

| | KV-XA29M31 | KV-XA29M50 | KV-XA29M61 | KV-XA34M31 |
|---|---|---|---|---|
| C6244 | 0.0047 B :CHIP | 0.0047 B :CHIP | 0.0047 B :CHIP | 0.0068 B :CHIP |
| C6245 | 0.0047 B :CHIP | 0.0047 B :CHIP | 0.0047 B :CHIP | 0.0068 B :CHIP |
| R1343 | 1.0K :CHIP | 1.0K :CHIP | 1.0K :CHIP | # |

## 6-5 VOLTAGE MEASUREMENTS (For KV-XA29M31/XA29M50/XA29M61)

A (1/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] |
|---|---|---|
| IC001 | 1 | 0 |
| | 2 | 4.9 |
| | 3 | 0.7 |
| | 4 | 4.9 |
| | 5 | 4.9 |
| | 6 | 0 |
| | 7 | 3.9 |
| | 8 | 4.8 |
| | 9 | 0.5 |
| | 10 | 4.8 |
| | 11 | 4.9 |
| | 12 | 0 |
| | 13 | 2.2 |
| | 14 | 2.1 |
| | 15 | 4.9 |
| | 16 | 4.9 |
| | 17 | 0 |
| | 18 | 4.9(0) |
| | 19 | 2.7[2.1] |
| | 20 | 2.7 |
| | 21 | 4.9 |
| | 22 | 0 |
| | 23 | 4.9 |
| | 24 | 0.6 |
| | 25 | 4.9 |
| | 26 | 4.9 |
| | 27 | 4.8 |
| | 28 | 4.9 |
| | 29 | 0 |
| | 30 | 0 |
| | 31 | 0 |
| | 32 | 0 |
| | 33 | 4.9 |
| | 34 | 0 |
| | 35 | 0 |
| | 36 | 2.5 |
| | 37 | 2.5 |
| | 38 | 4.8[5.0] |
| | 39 | 4.9 |
| | 40 | 0[0.1] |
| | 41 | 0.4 |
| | 42 | 0.9 |
| | 43 | 0[0.1] |
| | 44 | 4.9 |
| | 45 | 4.9 |
| | 46 | 4.4 |
| | 47 | 4.9 |
| | 48 | 4.4 |
| | 49 | 0 |
| | 50 | 2.7 |
| | 51 | 0.1 |
| | 52 | 4.7(0.1) |
| IC002 | 1 | 0 |
| | 2 | 4.9 |
| | 3 | 4.9 |
| | 4 | 7.2 |
| | 5 | 4.9 |
| | 6 | 0 |
| | 7 | 0 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC003 | 1 | 0 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 4.9 |
| | 6 | 4.9 |
| | 7 | 0 |
| | 8 | 4.9 |
| IC100 | 1 | 4.9 |
| | 2 | 4.9 |
| | 3 | 0 |
| IC301 | 1 | 3.3 |
| | 2 | 5.0 |
| | 3 | 5.5[6.3]<4.8> |
| | 4 | 5.0 |
| | 5 | 4.9 |
| | 6 | 4.32 |
| | 7 | 1.8 |
| | 8 | 3.7 |
| | 9 | 4.7 |
| | 10 | 3.8 |
| | 11 | 5.0 |
| | 12 | 0 |
| | 13 | 3.7 |
| | 14 | 2.4 |
| | 15 | 3.6 |
| | 16 | 3.5 |
| | 17 | 5.4 |
| | 18 | 7.7 |
| | 19 | 0.8 |
| | 20 | 3.6 |
| | 21 | 3.1 |
| | 22 | 3.9 |
| | 23 | 2.9<3.6> |
| | 24 | 1.5 |
| | 25 | 1.5 |
| | 26 | 1.5 |
| | 27 | 0 |
| | 28 | 4.5 |
| | 29 | 4.5 |
| | 30 | 4.5 |
| | 31 | 8.8 |
| | 32 | 4.1 |
| | 33 | 4.1 |
| | 34 | 3.6 |
| | 35 | 8.7 |
| | 36 | 4.4 |
| | 37 | 4.5 |
| | 38 | 4.6 |
| | 39 | 4.6 |
| | 40 | 5.1 |
| | 41 | 5.1 |
| | 42 | 0 |
| | 43 | 5.0 |
| | 44 | 4.9 |
| | 45 | 8.6 |
| | 46 | 5.0 |
| | 47 | 8.7 |
| | 48 | 2.1(0.2) |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 49 | 5.3(4.3) |
| | 50 | 0 |
| | 51 | 0 |
| | 52 | 2.9 |
| IC302 | 1 | 0.9(1.6) |
| | 2 | 0 |
| | 3 | 1.3 |
| | 4 | 0 |
| | 5 | 4.9(1.7) |
| | 6 | 4.9 |
| | 7 | 1.1[0] |
| | 8 | 0[0.6] |
| | 9 | 0.6(0) |
| | 10 | 4.8(1.1) |
| | 11 | 0.1(4.9) |
| | 12 | 1.4(4.9) |
| | 13 | 0 |
| | 14 | 1.7[0] |
| | 15 | 0 |
| | 16 | 1.7(0.9) |
| IC502 | 1 | 0.9 |
| | 2 | 3.6 |
| | 3 | 1.7 |
| | 4 | 0 |
| | 5 | 2.9 |
| | 6 | 2.4 |
| | 7 | 6.9 |
| | 8 | 8.8 |
| IC503 | 1 | 1.6 |
| | 2 | 13.2 |
| | 3 | 13.4 |
| | 4 | 14.7 |
| | 5 | 0.3 |
| | 6 | 13.3 |
| | 7 | 1.6 |
| IC601 | 1 | 1.9 |
| | 2 | 0.1 |
| | 3 | 288.5 |
| | 4 | 17.0 |
| | 5 | 0 |
| IC602 | 1 | 122.4 |
| | 2 | 135.1 |
| | 3 | 0 |
| IC603 | I | 7.5[12.36] |
| | 3 | 3.8 |
| | 4 | 17.0 |
| PH600 | 1 | 129.1 |
| | 2 | 128.1 |
| | 3 | 3.8 |
| | 4 | 17.0 |
| Q002 | B | 0 |
| | C | 4.9 |
| | E | 0 |

A (2/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| Q101 | B | 2.8 | Q311 | B | 0 | Q509 | B | 0.6 |
| | C | 8.8 | | C | 8.9 | | C | 0.1 |
| | E | 2.2 | | E | 0 | | E | 0 |
| Q301 | B | 12.4 | Q313 | B | 0 | Q511 | B | -0.1 |
| | C | 0 | | C | 12.2 | | C | 123.1 |
| | E | 12.2 | | E | 0 | | E | 122.9(0) |
| Q302 | B | 1.7 | Q314 | B | 0.5 | Q600 | B | 0 |
| | C | 8.1 | | C | 0 | | C | 12.4 |
| | E | 1.1 | | E | 1.1 | | E | 0 |
| Q303 | B | 8.1 | Q315 | B | 0 | Q601 | B | -0.8 |
| | C | 1.8 | | C | 1.6 | | C | -0.5 |
| | E | 8.7 | | E | 0 | | E | -0.7 |
| Q304 | B | 3.6 | Q316 | B | 0(4.0) | Q602 | B | 0 |
| | C | 0 | | C | 0 | | C | 16. |
| | E | 4.3 | | E | 4.7 | | E | 0 |
| Q305 | B | 0(8.1) | Q501 | B | 3.5 | Q603 | B | 16.9 |
| | C | 1.9(1.5) | | C | 0 | | C | 0 |
| | E | 8.7 | | E | 4.0 | | E | 17.0 |
| Q306 | B | 1.7 | Q502 | B | 4.2 | Q604 | B | 133.9 |
| | C | 8.1 | | C | 2.4 | | C | 0 |
| | E | 1.1 | | E | 4.0 | | E | 133.9 |
| Q307 | B | 4.3 | Q503 | B | 0 | Q605 | D | 391.8 |
| | C | 8.7 | | C | 3.6 | | G | 112.7 |
| | E | 3.7 | | E | 0 | | S | 112.4 |
| Q308 | B | 3.5 | Q505 | D | 16.4 | Q606 | B | 113.2 |
| | C | 0.5 | | G | 6.9 | | C | 113.2 |
| | E | 0.8 | | S | 0 | | E | 112.3 |
| Q309 | B | 4.8(0) | Q506 | B | -0.6 | Q607 | B | 0.8 |
| | C | 0(4.9) | | C | 90.2 | | C | 0.1 |
| | E | 0 | | E | 0 | | E | 0 |
| Q310 | B | 2.1(0)[0.2] | Q507 | B | 12.7 | Q608 | B | 0 |
| | C | 4.9 | | C | 0(0.4) | | C | 0.8 |
| | E | 1.2(0) | | E | 13.2 | | E | 0 |

B1 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC1502 | 1 | 3.1 | Q1502 | B | 2.3 | Q1511 | B | 0.7 |
| | 2 | 3.0 | | C | 2.3 | | C | 0.7 |
| | 3 | 3.2 | | E | 2.5 | | E | 0 |
| | 4 | 4.6 | Q1503 | B | 0.6 | Q1514 | B | 0.6 |
| | 5 | 4.6 | | C | 0.6 | | C | 0.6 |
| | 6 | 0 | | E | 0.6 | | E | 0.6 |
| | 7 | 0 | Q1505 | B | 0.6 | Q1515 | B | 0.6 |
| | 8 | 0 | | C | 0.8 | | C | 0.6 |
| | 9 | 8.1 | | E | 0 | | E | 0.6 |
| | 10 | 7.9 | Q1507 | B | 0.7 | Q1516 | B | 0.5 |
| | 11 | 7.9 | | C | 0.8 | | C | 0.5 |
| | 12 | 7.6 | | E | 0.7 | | E | 0.5 |
| | 13 | 7.6 | Q1509 | B | 0.8 | Q1520 | B | 0.5 |
| | 14 | 7.3 | | C | 0.8 | | C | 0.4 |
| | 15 | 7.6 | | E | 0 | | E | 0 |
| | 16 | 7.6 | Q1510 | B | 0.7 | Q1522 | B | 0.4 |
| Q1501 | B | 2.5 | | C | 0.7 | | C | 0 |
| | C | 2.4 | | E | 0 | | E | 0.5 |
| | E | 2.4 | | | | Q1523 | B | 0.4 |
| | | | | | | | C | 0 |
| | | | | | | | E | 0.5 |

B (1/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] |
|---|---|---|
| IC1401 | 1 | 3.9 |
| | 2 | 3.9 |
| | 3 | 3.9 |
| | 4 | 3.9 |
| | 5 | 3.9 |
| | 6 | 8.1 |
| | 7 | 3.9 |
| | 8 | 3.9 |
| | 9 | 3.9 |
| | 10 | 3.9 |
| | 11 | 3.9 |
| | 12 | 8.1 |
| | 13 | 3.9 |
| | 14 | 3.9 |
| | 15 | 3.9 |
| | 16 | 3.9 |
| | 17 | 3.9 |
| | 18 | 8.1 |
| | 19 | 4.4 |
| | 20 | 4.4 |
| | 21 | 0 |
| | 22 | 3.9 |
| | 23 | 3.8 |
| | 24 | 3.9 |
| | 25 | 3.8 |
| | 26 | 3.9 |
| | 27 | 3.8 |
| | 28 | 3.9 |
| | 29 | 3.8 |
| | 30 | 3.8 |
| | 31 | 3.9 |
| | 32 | 3.9 |
| | 33 | 3.8 |
| | 34 | 0 |
| | 35 | 3.8 |
| | 36 | 0 |
| | 37 | 3.8 |
| | 38 | 3.9 |
| | 39 | 3.9 |
| | 40 | 3.8 |
| | 41 | 3.8 |
| | 42 | 4.0 |
| | 43 | 3.7 |
| | 44 | 8.8 |
| | 45 | 3.8 |
| | 46 | 3.8 |
| | 47 | 3.8 |
| | 48 | 3.8 |
| IC1402 | 1 | 4.8 |
| | 2 | 2.4 |
| | 3 | 2.4 |
| | 4 | 0 |
| | 5 | 2.4 |
| | 6 | 2.4 |
| | 7 | 4.9 |
| | 8 | 9.0 |
| IC1403 | I | 7.4 |
| | G | 0 |
| | O | 8.8 |
| IC1404 | I | 12.1 |
| | G | 0 |
| | O | 8.8 |
| IC3200 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.4 |
| | 4 | 0 |
| | 5 | 4.4 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 8.8 |
| IC3201 | 1 | 0.1 |
| | 2 | 0.1 |
| | 3 | 8.8 |
| | 4 | 4.4 |
| | 5 | 4.4 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 0 |
| | 9 | 4.4 |
| | 10 | 4.4 |
| | 11 | 4.4 |
| | 12 | 4.4 |
| | 13 | 4.4 |
| | 14 | 4.4 |
| | 15 | 4.4 |
| | 16 | 4.4 |
| IC3202 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.3 |
| | 4 | 0 |
| | 5 | 4.3 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 8.8 |
| IC3203 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.4 |
| | 4 | 4.4 |
| | 5 | 8.7 |
| | 6 | 0.4 |
| | 7 | 0 |
| | 8 | 0.3 |
| | 9 | 0.3 |
| | 10 | 0.3 |
| | 11 | 0.3 |
| | 12 | 0.3 |
| | 13 | 8.7 |
| | 14 | 8.8 |
| IC3204 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.2 |
| | 4 | 0 |
| | 5 | 4.3 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 8.8 |
| IC3205 | 1 | 0.1 |
| | 2 | 0.1 |
| | 3 | 8.7 |
| | 4 | 0.4 |
| | 5 | 0.4 |
| | 6 | 0.4 |
| | 7 | 0.4 |
| | 8 | 0 |
| | 9 | 2.2 |
| | 10 | 2.3 |
| | 11 | 0 |
| | 12 | 0 |
| | 13 | 8.8 |
| | 14 | 4.5 |
| | 15 | 4.4 |
| | 16 | 8.8 |
| IC3206 | 1 | 0 |
| | 2 | 0 |
| | 3 | 0(0.1) |
| | 4 | 4.4 |
| | 5 | 0(4.4) |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 4.4 |
| | 9 | 4.4 |
| | 10 | 4.4 |
| | 11 | 4.4 |
| | 12 | 4.4 |
| | 13 | 0(1.6) |
| | 14 | 2.0 |
| | 15 | 8.8 |
| | 16 | 0.1 |
| | 17 | 4.4 |
| | 18 | 4.4 |
| | 19 | 2.0 |
| | 20 | 1.6[0.1] |
| | 21 | 4.4 |
| | 22 | 4.4 |
| | 23 | 4.4 |
| | 24 | 0(4.4) |
| | 25 | 4.4 |
| | 26 | 4.4 |
| | 27 | 4.4 |
| | 28 | 4.4 |
| | 29 | 4.4 |
| | 30 | 4.4 |
| | 31 | 3.1 |
| | 32 | 4.4 |
| IC6200 | 1 | 1.6 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 1.6 |
| | 6 | 9.8 |

B (2/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| | 7 | 13.6 | Q1372 | B | 2.4 | Q1409 | B | 2.4 |
| | 8 | 5.0 | | C | 8.8 | | C | 5.6 |
| | 9 | 28.9 | | E | 1.8 | | E | 1.8 |
| | 10 | 0 | Q1401 | B | 3.8 | Q1410 | B | 3.8 |
| | 11 | 4.1 | | C | 8.8 | | C | 8.7 |
| | 12 | 13.2 | | E | 3.1 | | E | 3.2 |
| Q1316 | B | 8.2 | Q1402 | B | 3.8 | Q3201 | D | 4.2 |
| | C | 4.9 | | C | 0 | | G | 39 |
| | E | 8.8 | | E | 4.4 | | S | 4.2 |
| Q1317 | B | 4.9 | Q1403 | B | 3.7 | Q3203 | B | 4.0 |
| | C | 8.8 | | C | 8.8 | | C | 8.6 |
| | E | 4.3 | | E | 3.1 | | E | 3.5 |
| Q1318 | B | 3.1 | Q1404 | B | 3.8 | Q3204 | D | 4.2 |
| | C | 6.9 | | C | 8.8 | | G | 3.9 |
| | E | 2.4 | | E | 3.1 | | S | 4.3 |
| Q1323 | B | 4.9(2.7) | Q1405 | B | 3.9 | Q6201 | B | 0 |
| | C | 8.8 | | C | 5.6 | | C | 4.1 |
| | E | 4.3(2.1) | | E | 3.2 | | E | 0 |
| Q1324 | B | 6.9 | Q1406 | B | 3.9 | Q6203 | B | 0 |
| | C | 8.8 | | C | 5.6 | | C | 0 |
| | E | 6.3 | | E | 3.2 | | E | 0 |
| Q1365 | B | 3.1 | Q1408 | B | 5.6 | Q6204 | B | 0 |
| | C | 6.3 | | C | 8.8 | | C | 0 |
| | E | 2.4 | | E | 5.0 | | E | 0 |
| | | | | | | Q6208 | B | 0 |
| | | | | | | | C | 9.7 |
| | | | | | | | E | 0 |

D3 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|
| IC2800 | I | 13.3 | Q2800 | B | 0.3 |
| | G | 0 | | C | 0.3 |
| | O | 9.1 | | E | 0 |
| IC2801 | 1 | 4.5 | Q2801 | B | 0.3 |
| | 2 | 4.5 | | C | 1.9 |
| | 3 | 4.5 | | E | 0 |
| | 4 | 0 | Q2802 | B | 13.3 |
| | 5 | 0.5 | | C | 13.3 |
| | 6 | 0.5 | | E | 13.3 |
| | 7 | 7.9 | Q2803 | B | 12.7 |
| | 8 | 9.1 | | C | 13.3 |
| | | | | E | 13.3 |
| | | | Q2804 | B | 2.1 |
| | | | | C | 12.7 |
| | | | | E | 1.5 |

C6 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage(V) | Ref | Pin No | Voltage(V) |
|---|---|---|---|---|---|
| IC1800 | 1 | 4.8 | Q708 | B | 159.1(161)[162.5]<152.7> |
| | 2 | 4.7 | | C | 4.2(3.6)[3.4]<5.0> |
| | 3 | 5.6 | | E | 155.2(156.5)[158.2]<148.7> |
| | 4 | 5.6 | Q709 | B | 162.6[165.7]<155.9> |
| | 5 | 0 | | C | 3.4[3.2]<4.6> |
| | 6 | 5.8 | | E | 158.5(160.1)[162.1]<151.8> |
| | 7 | 5.8 | Q710 | B | 1.5<1.7> |
| | 8 | 7.2 | | C | 8.3 |
| | 9 | 7.2 | | E | 1.2 |
| | 10 | 12.7 | Q711 | B | 1.6(1.5) |
| Q701 | B | 157.8[161.1]<152.1> | | C | 8.3 |
| | C | 202.5[202.3] | | E | 1.2(1.1) |
| | E | 158.3[161.3]<152.3> | Q712 | B | 1.5(1.4) |
| Q702 | B | 158.8(160.9) | | C | 8.3 |
| | | [162.4]<153.2> | | E | 1.1 |
| | C | 202.6[202.4] | Q714 | B | 0.7(0.5) |
| | E | 158.6(160)[162.4]<152.7> | | C | 0.2(0) |
| Q703 | B | 162.8(164) | | E | 0<0.1> |
| | | [166.1]<155.8> | Q1800 | B | 3.9 |
| | C | 202.4 | | C | 0 |
| | E | 163.1[165.7]<155.9> | | E | 4.6 |
| Q704 | B | 8.9[8.7] | Q1802 | B | 0.5 |
| | C | 156.4(158.3)[160.3]<150.7> | | C | 2.0 |
| | E | 8.3[8.1] | | E | 0 |
| Q705 | B | 8.9 | Q1803 | B | 0 |
| | C | 158.8(161)[162.4]<152.8> | | C | 4.9 |
| | E | 8.3 | | E | 0 |
| Q706 | B | 8.9(8.6) | J701 | KR | 16.1[162.4]<152.5> |
| | C | 162.8[166.1]<155.7> | | KG | 156[158.7]<149.3> |
| | E | 8.3(8.1) | | KB | 156[157.8]<149.8> |
| Q707 | B | 159.1[161.2]<152.5> | | HI | 0 |
| | C | 3.9[4.7]<3.2> | | G2 | 301.1(303.6)[305.5]<298.6> |
| | E | 155.1[157.9]<148.6> | | | |

VM1 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|
| Q5901 | B | 2.6 | Q5906 | B | 0 |
| | C | 8.8 | | C | 0.2 |
| | E | 2.0 | | E | 0 |
| Q5902 | B | 0.5 | Q5907 | B | 0.8 |
| | C | 0.1 | | C | 0 |
| | E | 0.5 | | E | 0 |
| Q5903 | B | 2.6 | Q5908 | B | 4.3 |
| | C | 4.6 | | C | 0 |
| | E | 2.0 | | E | 0 |
| Q5904 | B | 4.6 | Q5909 | B | 0 |
| | C | 0 | | C | 8.8 |
| | E | 5.0 | | E | 4.3 |
| Q5905 | B | 5.6 | | | |
| | C | 8.8 | | | |
| | E | 5.0 | | | |

H BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] |
|---|---|---|
| IC3901 | 1 | 4.9 |
| | 2 | 4.9 |
| | 3 | 0 |
| Q3901 | B | 0.1 |
| | C | 4.9 |
| | E | 0.1 |
| Q3902 | B | 4.7 |
| | C | 2.2 |
| | E | 1.8 |

V1 BOARD VOLTAGE LIST (KV-XA29M31 and KV-XA29M61 only)

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC801 | 1 | 0.4 | | 27 | 0 | Q801 | B | 0 |
| | 2 | 4.9 | | 28 | 0 | | C | 4.9 |
| | 3 | 0.4 | | 29 | 0.4 | | E | 0 |
| | 4 | 0.4 | | 30 | 2.0 | Q803 | B | 0 |
| | 5 | 4.9 | | 31 | 2.0 | | C | 0 |
| | 6 | 4.9 | | 32 | 0 | | E | 0.6 |
| | 7 | 0 | | 33 | 0 | Q805 | B | 0.4 |
| | 8 | 0 | | 34 | 0 | | C | 0.9 |
| | 9 | 4.8 | | 35 | 0 | | E | 0 |
| | 10 | 0 | | 36 | 0.9 | Q806 | B | 0 |
| | 11 | 2.4 | | 37 | 0.1 | | C | 4.9 |
| | 12 | 2.3 | | 38 | 4.9 | | E | 0 |
| | 13 | 0 | | 38 | 4.9 | Q807 | B | 0 |
| | 14 | 4.9 | | 39 | 4.9 | | C | 4.9 |
| | 15 | 4.9 | | 40 | 0 | | E | 0 |
| | 16 | 0.2 | | 41 | 2.3 | Q808 | B | 0 |
| | 17 | 0.9 | | 42 | 2.4 | | C | 4.9 |
| | 18 | 0 | | 43 | 0 | | E | 0 |
| | 19 | 0 | | 44 | 4.8 | Q810 | B | 0.2 |
| | 20 | 0.5 | | 45 | 0 | | C | 4.0 |
| | 21 | 0.5 | | 46 | 0 | | E | 0 |
| | 22 | 0 | | 47 | 4.9 | Q811 | B | 5.5 |
| | 23 | 2.2 | | 48 | 0 | | C | 6.3 |
| | 24 | 0.5 | | 49 | 4.4 | | E | 4.9 |
| | 25 | 2.0 | | 50 | 4.5 | Q817 | B | 2.8 |
| | 26 | 2.4 | | 51 | 0 | | C | 0.1 |
| | | | | 52 | 0 | | E | 0 |

## VOLTAGE MEASUREMENTS (For KV-XA34M31)

A (1/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] |
|---|---|---|
| IC001 | 1 | 0 |
| | 2 | 4.8 |
| | 3 | 0.5 |
| | 4 | 4.9 |
| | 5 | 4.9 |
| | 6 | 4.9 |
| | 7 | 3.8 |
| | 8 | 4.8 |
| | 9 | 0.5 |
| | 10 | 4.8 |
| | 11 | 4.9 |
| | 12 | 0 |
| | 13 | 2.2 |
| | 14 | 2.1 |
| | 15 | 4.9 |
| | 16 | 4.9 |
| | 17 | 0 |
| | 18 | 4.9[0] |
| | 19 | 1.9[2.6] |
| | 20 | 2.5 |
| | 21 | 4.9 |
| | 22 | 0 |
| | 23 | 4.9 |
| | 24 | 4.9 |
| | 25 | 4.9 |
| | 26 | 4.9 |
| | 27 | 4.8 |
| | 28 | 4.9 |
| | 29 | 0 |
| | 30 | 0 |
| | 31 | 0 |
| | 32 | 0 |
| | 33 | 4.9 |
| | 34 | 0 |
| | 35 | 0 |
| | 36 | 2.4 |
| | 37 | 2.5 |
| | 38 | 4.9 |
| | 39 | 5.0 |
| | 40 | 0.1 |
| | 41 | 0.3 |
| | 42 | 0.3 |
| | 43 | 0.1 |
| | 44 | 5.0 |
| | 45 | 5.1 |
| | 46 | 4.5 |
| | 47 | 5.1 |
| | 48 | 4.6 |
| | 49 | 0.1 |
| | 50 | 2.2 |
| | 51 | 0.1 |
| | 52 | 4.8[0.1] |
| IC002 | 1 | 0 |
| | 2 | 4.9 |
| | 3 | 4.9 |
| | 4 | 7.3 |
| | 5 | 4.9 |
| | 6 | 0 |
| | 7 | 0 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC003 | 1 | 0 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 4.9 |
| | 6 | 4.9 |
| | 7 | 0 |
| | 8 | 4.9 |
| IC100 | 1 | 4.9[0] |
| | 2 | 4.9 |
| | 3 | 0 |
| IC301 | 1 | 3.3<3.8> |
| | 2 | 5.0 |
| | 3 | 1.5 |
| | 4 | 5.0 |
| | 5 | 4.8 |
| | 6 | 4.3 |
| | 7 | 1.8(1.6) |
| | 8 | 3.7 |
| | 9 | 4.6 |
| | 10 | 3.8 |
| | 11 | 5.0 |
| | 12 | 0 |
| | 13 | 3.9 |
| | 14 | 2.4 |
| | 15 | 3.5 |
| | 16 | 3.5 |
| | 17 | 5.4 |
| | 18 | 7.7 |
| | 19 | 0.8 |
| | 20 | 3.6 |
| | 21 | 3.4 |
| | 22 | 3.9 |
| | 23 | 3.4 |
| | 24 | 1.7 |
| | 25 | 1.7 |
| | 26 | 1.6 |
| | 27 | 0 |
| | 28 | 4.5 |
| | 29 | 4.5 |
| | 30 | 4.5 |
| | 31 | 8.8 |
| | 32 | 4.1 |
| | 33 | 4.1 |
| | 34 | 3.6 |
| | 35 | 8.7 |
| | 36 | 4.4 |
| | 37 | 4.4 |
| | 38 | 4.6 |
| | 39 | 4.7 |
| | 40 | 5.1 |
| | 41 | 5.1 |
| | 42 | 0 |
| | 43 | 5.0 |
| | 44 | 4.9 |
| | 45 | 6.9(7.4) |
| | 46 | 5.0 |
| | 47 | 8.7 |
| | 48 | 2.1(0.2) |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 49 | 5.3(4.3) |
| | 50 | 0 |
| | 51 | 0 |
| | 52 | 3.0 |
| IC302 | 1 | 0.9 |
| | 2 | 0 |
| | 3 | 1.2 |
| | 4 | 0 |
| | 5 | 4.8 |
| | 6 | 4.8 |
| | 7 | 1.0 |
| | 8 | 0 |
| | 9 | 0.7 |
| | 10 | 4.8(0) |
| | 11 | 0[4.9] |
| | 12 | 1.4 |
| | 13 | 0 |
| | 14 | 1.6 |
| | 15 | 0 |
| | 16 | 1.7 |
| IC502 | 1 | 1.3 |
| | 2 | 5.9 |
| | 3 | 1.2 |
| | 4 | 0 |
| | 5 | 2.5 |
| | 6 | 1.6 |
| | 7 | 6.5 |
| | 8 | 8.9 |
| IC503 | 1 | 1.5 |
| | 2 | 13.1 |
| | 3 | -13.4 |
| | 4 | -14.8 |
| | 5 | 0.2 |
| | 6 | 13.3 |
| | 7 | 1.5 |
| IC601 | 1 | 2.0 |
| | 2 | 0.1 |
| | 3 | 272.1(294.8) |
| | 4 | 16.8 |
| | 5 | 0 |
| IC602 | 1 | 122.3 |
| | 2 | 135.2 |
| | 3 | 0 |
| IC603 | I | 12.3 |
| | G | 0 |
| | O | 8.9 |
| IC604 | I | 7.4 |
| | G | 0 |
| | O | 5.0 |
| PH600 | 1 | 129.2 |
| | 2 | 128.2 |
| | 3 | 3.4 |
| | 4 | 16.8 |

A (2/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| Q003 | B | 0 | Q311 | B | 0 | Q509 | B | 0.6 |
| | C | 4.9 | | C | 8.9 | | C | 0.1 |
| | E | 0 | | E | 0 | | E | 0 |
| Q101 | B | 2.8(2.0) | Q313 | B | 0 | Q511 | B | -0.2 |
| | C | 8.8 | | C | 11.9[12.1] | | C | 100.1(122.8) |
| | E | 2.2(2.6) | | E | 0 | | E | 0.1 |
| Q301 | B | 12.2 | Q314 | B | 0.5 | Q600 | B | 0 |
| | C | 0 | | C | 0 | | C | 12.3 |
| | E | 12.0 | | E | 1.0 | | E | 0 |
| Q302 | B | 1.7 | Q315 | B | 0 | Q601 | B | 0.7 |
| | C | 8.1 | | C | 2.0<2.3> | | 3C | 0.4 |
| | E | 1.1 | | E | 0 | | E | 0.7 |
| Q303 | B | 8.1 | Q316 | B | 4.1 | Q602 | B | 0.2 |
| | C | 1.8 | | C | 0 | | C | 16.8 |
| | E | 8.7 | | E | 4.7(5.0) | | E | 0 |
| Q304 | B | 3.6 | Q501 | B | 3.5 | Q603 | B | 16.8 |
| | C | 0 | | C | 0 | | C | 3.4 |
| | E | 4.3 | | E | 4.0 | | E | 16.8 |
| Q305 | B | 8.1 | Q502 | B | 4.3 | Q604 | B | 134.0 |
| | C | 1.7 | | C | 1.6 | | C | 0.1 |
| | E | 8.7 | | E | 4.0 | | E | 134.5 |
| Q306 | B | 1.6 | Q503 | B | 0.1 | Q605 | D | 394.7(397.4) |
| | C | 8.1 | | C | 3.6 | | | [388.6] |
| | E | 1.0 | | E | 0 | | G | 111.8(112.3) |
| Q307 | B | 4.3 | Q505 | D | 15.6 | | S | 111.1 |
| | C | 8.7 | | G | 6.5 | Q606 | B | 112.3<111.8> |
| | E | 3.7 | | S | 0 | | C | 112.8<111.8> |
| Q308 | B | 3.6 | Q506 | B | -0.8 | | E | 111.7<10.8> |
| | C | 0.5 | | C | 91.3 | Q607 | B | 0.7 |
| | E | 0.8 | | E | 0 | | C | 0 |
| Q309 | B | 4.8[0] | Q507 | B | 12.6 | | E | 0 |
| | C | 0[4.9] | | C | 0.5 | Q608 | B | 0 |
| | E | 0 | | E | 13.1 | | C | 0.7 |
| Q310 | B | 2.0(0.2) | | | | | E | 0 |
| | C | 4.9 | | | | | | |
| | E | 0(1.2) | | | | | | |

B (1/2) BOARD VOLTAGE LIST

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC1401 | 1 | 3.9 |
| | 2 | 3.9 |
| | 3 | 3.9 |
| | 4 | 3.9 |
| | 5 | 3.9 |
| | 6 | 3.1(8.1) |
| | 7 | 3.9 |
| | 8 | 3.9 |
| | 9 | 3.9 |
| | 10 | 3.9 |
| | 11 | 3.9 |
| | 12 | 8.1 |
| | 13 | 3.9 |
| | 14 | 3.9 |
| | 15 | 3.9 |
| | 16 | 0(3.9) |
| | 17 | 3.9 |
| | 18 | 3.1(8.1) |
| | 19 | 4.4 |
| | 20 | 4.5 |
| | 21 | 0 |
| | 22 | 3.9 |
| | 23 | 3.9 |
| | 24 | 3.9 |
| | 25 | 3.9 |
| | 26 | 3.9 |
| | 27 | 3.9 |
| | 28 | 3.9 |
| | 29 | 3.8 |
| | 30 | 3.8 |
| | 31 | 3.9 |
| | 32 | 3.9 |
| | 33 | 3.9 |
| | 34 | 0 |
| | 35 | 3.9 |
| | 36 | 0 |
| | 37 | 3.8 |
| | 38 | 3.9 |
| | 39 | 3.9 |
| | 40 | 3.8 |
| | 41 | 3.8 |
| | 42 | 3.9 |
| | 43 | 3.8 |
| | 44 | 3.8(8.8) |
| | 45 | 3.8 |
| | 46 | 3.9 |
| | 47 | 3.8 |
| | 48 | 3.9 |
| IC1402 | 1 | 4.9 |
| | 2 | 2.4 |
| | 3 | 2.4 |
| | 4 | 0 |
| | 5 | 2.4 |
| | 6 | 2.4 |
| | 7 | 0(4.9) |
| | 8 | 8.8 |
| IC1403 | I | 7.3 |
| | G | 0 |
| | O | 5.0 |
| IC1404 | I | 11.9 |
| | G | 0 |
| | O | 8.8 |
| IC3200 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.4 |
| | 4 | 0 |
| | 5 | 4.4 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 8.7 |
| IC3201 | 1 | 0.1 |
| | 2 | 8.2 |
| | 3 | 8.7 |
| | 4 | 4.4 |
| | 5 | 4.4 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 0 |
| | 9 | 4.4 |
| | 10 | 4.4 |
| | 11 | 4.4 |
| | 12 | 4.4 |
| | 13 | 4.4 |
| | 14 | 4.4 |
| | 15 | 4.4 |
| | 16 | 4.4 |
| IC3202 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.3 |
| | 4 | 0 |
| | 5 | 4.3 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 8.7 |
| IC3203 | 1 | 4.4 |
| | 2 | 4.4 |
| | 3 | 4.4 |
| | 4 | 4.4 |
| | 5 | 0.4 |
| | 6 | 0.2 |
| | 7 | 0 |
| | 8 | 0.2 |
| | 9 | 0.2 |
| | 10 | 0.2 |
| | 11 | 0.2 |
| | 12 | 0.2 |
| | 13 | 0.4 |
| | 14 | 8.7 |
| IC3204 | 1 | 4.3 |
| | 2 | 4.3 |
| | 3 | 4.3 |
| | 4 | 0 |
| | 5 | 4.3 |
| | 6 | 4.3 |
| | 7 | 4.3 |
| | 8 | 8.7 |
| IC3205 | 1 | 8.2 |
| | 2 | 0.1 |
| | 3 | 0.4 |
| | 4 | 0.4 |
| | 5 | 0.4 |
| | 6 | 0.4 |
| | 7 | 0.4 |
| | 8 | 0 |
| | 9 | 2.2 |
| | 10 | 2.2 |
| | 11 | 0 |
| | 12 | 0 |
| | 13 | 8.7 |
| | 14 | 2.2 |
| | 15 | 4.4 |
| | 16 | 0(8.7) |
| IC3206 | 1 | 0 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 4.4 |
| | 5 | 4.3 |
| | 6 | 4.4 |
| | 7 | 4.4 |
| | 8 | 4.4 |
| | 9 | 4.4 |
| | 10 | 4.4 |
| | 11 | 4.3 |
| | 12 | 4.4 |
| | 13 | 1.7 |
| | 14 | 1.4 |
| | 15 | 8.7 |
| | 16 | 0 |
| | 17 | 4.4 |
| | 18 | 4.5 |
| | 19 | 1.9 |
| | 20 | 1.7 |
| | 21 | 4.4 |
| | 22 | 4.3 |
| | 23 | 0(4.3) |
| | 24 | 0(4.3) |
| | 25 | 0(4.3) |
| | 26 | 4.4 |
| | 27 | 4.3 |
| | 28 | 0(4.3) |
| | 29 | 4.3 |
| | 30 | 4.4 |
| | 31 | 4.0 |
| | 32 | 4.3 |

B (2/2) BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC6200 | 1 | 1.6 | Q1365 | B | 3.1 | Q1409 | B | 2.4 |
| | 2 | 0 | | C | 6.4 | | C | 5.8 |
| | 3 | 0 | | E | 2.5 | | E | 1.8 |
| | 4 | 0 | Q1372 | B | 2.4 | Q1410 | B | 3.8 |
| | 5 | 1.6 | | C | 8.8 | | C | 8.7 |
| | 6 | 9.3 | | E | 1.8 | | E | 3.2(3.8) |
| | 7 | 12.6 | Q1401 | B | 3.8 | Q3201 | D | 4.2 |
| | 8 | 5.2 | | C | 8.8 | | G | 3.9 |
| | 9 | 27.6 | | E | 3.2 | | S | 4.2 |
| | 10 | 0 | Q1402 | B | 3.8 | Q3203 | B | 3.9 |
| | 11 | 4.3 | | C | 0 | | C | 8.5 |
| | 12 | 12.2 | | E | 4.5 | | E | 3.4 |
| Q1316 | B | 8.2 | Q1403 | B | 3.7 | Q3204 | D | 4.2 |
| | C | 4.4 | | C | 8.8 | | G | 3.9 |
| | E | 8.8 | | E | 3.1 | | S | 4.3 |
| Q1317 | B | 4.4 | Q1404 | B | 3.9 | Q6201 | B | 0 |
| | C | 8.8 | | C | 8.8 | | C | 4.3 |
| | E | 3.7 | | E | 3.2 | | E | 0 |
| Q1318 | B | 3.1 | Q1405 | B | 3.9 | Q6203 | B | 0 |
| | C | 6.9 | | C | 5.5 | | C | 0 |
| | E | 2.4 | | E | 3.3 | | E | 0 |
| Q1323 | B | 2.7 | Q1406 | B | 3.9 | Q6204 | B | 0 |
| | C | 8.2 | | C | 5.6 | | C | 0 |
| | E | 2.0 | | E | 3.3 | | E | 0 |
| Q1324 | B | 6.9 | Q1408 | B | 5.8 | Q6208 | B | 0 |
| | C | 0(8.8) | | C | 8.8 | | C | 9.2 |
| | E | 6.2 | | E | 5.1 | | E | 0 |

C6 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage(V) | Ref | Pin No | Voltage(V) | Ref | Pin No | Voltage(V) |
|---|---|---|---|---|---|---|---|---|
| IC1800 | 1 | 6.5 | Q703 | B | 151.3<145.3> | Q710 | B | 1.6 |
| | 2 | 6.5 | | C | 206.3 | | C | 8.3 |
| | 3 | 6.5 | | E | 152.9<146.4> | | E | 1.2[1.4] |
| | 4 | 6.4 | Q704 | B | 8.9 | Q711 | B | 1.8 |
| | 5 | 0 | | C | 154.2(151.0) | | C | 8.2 |
| | 6 | 6.4 | | E | 8.3 | | E | 1.4 |
| | 7 | 6.4 | Q705 | B | 8.9 | Q712 | B | 1.6 |
| | 8 | 6.4 | | C | 153.4(148.7) | | C | 8.3 |
| | 9 | 6.4 | | E | 8.3 | | E | 1.3 |
| | 10 | 12.6 | Q706 | B | 8.9 | Q714 | B | 0.7 |
| J701 | KR | 152.8<146.9> | | C | 152.4<144.1> | | C | 0.1[0.2] |
| | KG | 148.5<142.8> | | E | 8.3 | | E | 0 |
| | KB | 154.8[151.4]<147.8> | Q707 | B | 1155.6<148.8> | Q1800 | B | 3.8 |
| | HI | 0.35 | | C | 5.4 | | C | 0 |
| | G2 | 284.0(284.8) | | E | 155.8<145.5> | | E | 4.5 |
| Q701 | B | 154.2[150.7] | Q708 | B | 151.3[146.6] | Q1802 | B | 0.4 |
| | C | 206.3 | | C | 6.0 | | C | 3.4 |
| | E | 157.1(152.1) | | E | 150.3(148.1) | | E | 0 |
| Q702 | B | 151.2(148.6)<148.5> | Q709 | B | 154.1<145.7> | Q1803 | B | 0 |
| | C | 206.4 | | C | 5.4 | | C | 6.5 |
| | E | 151.3(148.5) | | E | 153.7(150.4)<144.5> | | E | 0 |

VM1 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| Q5901 | B | 2.7 | Q5904 | B | 4.6 | Q5907 | B | 0 |
| | C | 8.8 | | C | 0 | | C | 0.7 |
| | E | 2.0 | | E | 5.1 | | E | 0 |
| Q5902 | B | -0.7 | Q5905 | B | 5.6 | Q5908 | B | 3.8 |
| | C | -0.4 | | C | 8.8 | | C | 0 |
| | E | -0.8 | | E | 5.1 | | E | 0 |
| Q5903 | B | 2.7 | Q5906 | B | 0 | Q5909 | B | 0 |
| | C | 4.6 | | C | 0.5 | | C | 8.8 |
| | E | 2.0 | | E | 0 | | E | 3.8 |

D2 BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|
| IC2801 | 1 | 5.7 | Q2806 | B | 1.6 |
| | 2 | 6.3 | | C | 8.1 |
| | 3 | 6.3 | | E | 1.6 |
| | 4 | 0 | Q2805 | B | 1.6 |
| | 5 | 6.4 | | C | 0 |
| | 6 | 6.3 | | E | 1.6 |
| | 7 | 0 | Q2807 | B | 1.4 |
| | 8 | 14.8 | | C | 0 |
| IC2805 | 1 | 0 | | E | 0 |
| | 2 | 0 | Q2811 | B | 5.7 |
| | 3 | 0 | | C | 0 |
| | 4 | 0 | | E | 5.5 |
| | 5 | 4.4 | Q2813 | B | 2.3 |
| | 6 | 4.4 | | C | 12.0 |
| | 7 | 4.4 | | E | 1.8 |
| | 8 | 4.4 | Q2822 | B | 11.5 |
| Q2802 | B | 1.6 | | C | 12.1 |
| | C | 0 | | E | 3.3 |
| | E | 2.3 | Q2823 | B | 3.3 |
| | | | | C | 12.1 |
| | | | | E | 2.7 |

H BOARD VOLTAGE LIST

| Ref | Pin No | Voltage[v] |
|---|---|---|
| IC3901 | 1 | 4.8 |
| | 2 | 4.8 |
| | 3 | 0 |
| Q3901 | B | 0.2 |
| | C | 5.0 |
| | E | 0.2 |
| Q3902 | B | 4.7 |
| | C | 2.1 |
| | E | 1.8 |

V1 BOARD VOLTAGE LIST

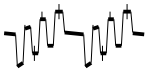
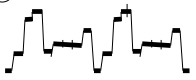
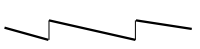
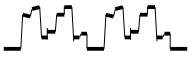
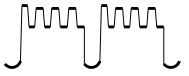
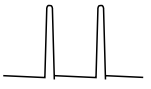
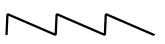
| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC801 | 1 | 0.4 | | 27 | 0 | Q801 | B | 0 |
| | 2 | 4.9 | | 28 | 0 | | C | 4.9 |
| | 3 | 0.4 | | 29 | 0.4 | | E | 0 |
| | 4 | 0.4 | | 30 | 2.0 | Q803 | B | 0 |
| | 5 | 4.9 | | 31 | 2.0 | | C | 0 |
| | 6 | 4.9 | | 32 | 0 | | E | 0.6 |
| | 7 | 0 | | 33 | 0 | Q805 | B | 0.4 |
| | 8 | 0 | | 34 | 0 | | C | 0.9 |
| | 9 | 4.8 | | 35 | 0 | | E | 0 |
| | 10 | 0 | | 36 | 0.9 | Q806 | B | 0 |
| | 11 | 2.4 | | 37 | 0.1 | | C | 4.9 |
| | 12 | 2.3 | | 38 | 4.9 | | E | 0 |
| | 13 | 0 | | 38 | 4.9 | Q807 | B | 0 |
| | 14 | 4.9 | | 39 | 4.9 | | C | 4.9 |
| | 15 | 4.9 | | 40 | 0 | | E | 0 |
| | 16 | 0.2 | | 41 | 2.3 | Q808 | B | 0 |
| | 17 | 0.9 | | 42 | 2.4 | | C | 4.9 |
| | 18 | 0 | | 43 | 0 | | E | 0 |
| | 19 | 0 | | 44 | 4.8 | Q810 | B | 0.2 |
| | 20 | 0.5 | | 45 | 0 | | C | 4.0 |
| | 21 | 0.5 | | 46 | 0 | | E | 0 |
| | 22 | 0 | | 47 | 4.9 | Q811 | B | 5.5 |
| | 23 | 2.2 | | 48 | 0 | | C | 6.3 |
| | 24 | 0.5 | | 49 | 4.4 | | E | 4.9 |
| | 25 | 2.0 | | 50 | 4.5 | Q817 | B | 2.8 |
| | 26 | 2.4 | | 51 | 0 | | C | 0.1 |
| | | | | 52 | 0 | | E | 0 |

B1 BOARD VOLTAGE LIST

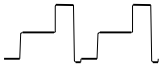
| Ref | Pin No | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC1502 | 1 | 3.1 | Q1502 | B | 2.3 | Q1511 | B | 0.7 |
| | 2 | 3.0 | | C | 2.3 | | C | 0.7 |
| | 3 | 3.2 | | E | 2.5 | | E | 0 |
| | 4 | 4.6 | Q1503 | B | 0.6 | Q1514 | B | 0.6 |
| | 5 | 4.6 | | C | 0.6 | | C | 0.6 |
| | 6 | 0 | | E | 0.6 | | E | 0.6 |
| | 7 | 0 | Q1505 | B | 0.6 | Q1515 | B | 0.6 |
| | 8 | 0 | | C | 0.8 | | C | 0.6 |
| | 9 | 8.1 | | E | 0 | | E | 0.6 |
| | 10 | 7.9 | Q1507 | B | 0.7 | Q1516 | B | 0.5 |
| | 11 | 7.9 | | C | 0.8 | | C | 0.5 |
| | 12 | 7.6 | | E | 0.7 | | E | 0.5 |
| | 13 | 7.6 | Q1509 | B | 0.8 | Q1520 | B | 0.5 |
| | 14 | 7.3 | | C | 0.8 | | C | 0.4 |
| | 15 | 7.6 | | E | 0 | | E | 0 |
| | 16 | 7.3 | Q1510 | B | 0.7 | Q1522 | B | 0.4 |
| Q1501 | B | 2.5 | | C | 0.7 | | C | 0 |
| | C | 2.4 | | E | 0 | | E | 0.5 |
| | E | 2.4 | | | | Q1523 | B | 0.4 |
| | | | | | | | C | 0 |
| | | | | | | | E | 0.5 |

## 6-6 WAVEFORMS (For KV-XA29M31/XA29M50/XA29M61)

### A BOARD WAVEFORMS

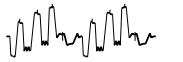
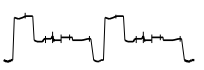
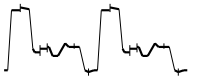
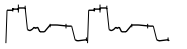
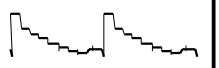
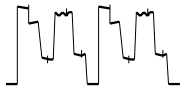
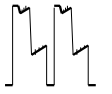
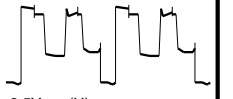
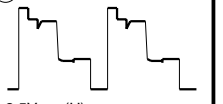
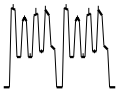
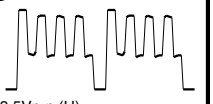
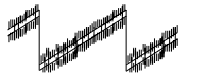
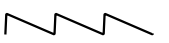
| | | | | |
|---|---|---|---|---|
| ① 4.8Vp-p (V) | ② 5.1Vp-p (V) | ③ 4.0Vp-p (V) | ④ PAL/SECAM  1.2Vp-p (H) | ④ NTSC 1.5Vp-p (H) |
| ⑤ PAL/SECAM 1.0Vp-p (V) | ⑤ NTSC  1.1Vp-p (V) | ⑥ 0.2Vp-p (H) | ⑦ PAL/SECAM 1.2Vp-p (H) | ⑦ NTSC 1.4Vp-p (H) |
| ⑧ PAL/SECAM 1.2Vp-p (H) | ⑧ NTSC 1.2Vp-p (H) | ⑨ PAL/SECAM 1.5Vp-p (H) | ⑨ NTSC  1.5Vp-p (H) | ⑩ PAL/SECAM 3.2Vp-p (H) |
| ⑩ NTSC  3.4Vp-p (H) | ⑪ 3.4Vp-p (H) | ⑫ PAL/SECAM  3.2Vp-p (H) | ⑫ NTSC 3.58 3.2Vp-p (H) | ⑫ NTSC 4.43 3.4Vp-p (H) |
| ⑬ PAL/SECAM/NTSC 3.58 1.3Vp-p (H) | ⑭ 106Vp-p | ⑮  240Vp-p | ⑯  1.1Vp-p (V) | |

### C6 BOARD WAVEFORMS

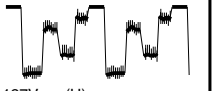
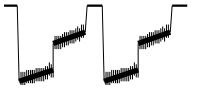
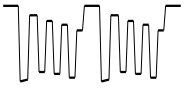
| | | |
|---|---|---|
| ① 113Vp-p (H) | ② PAL/SECAM 120Vp-p (H) | ② NTSC 113Vp-p (H) |
| ③ PAL/SECAM  PAL : 116Vp-p (H) SECAM : 126Vp-p (H) | ③ NTSC 117Vp-p (H) | ④ 22Vp-p (H) |

## 6-5-2 WAVEFORMS (For KV-XA34M31)

### A BOARD WAVEFORMS

| | | | | |
|---|---|---|---|---|
| ① 4.5Vp-p (V) | ② 5.2Vp-p (V) | ③ PAL : 3.5Vp-p (V) SECAM\NTSC : 3.1Vp-p (V) | ④ PAL/SECAM PAL : 1.0Vp-p (H) SECAM : 0.9Vp-p (H) | ④ NTSC  0.9Vp-p (H) |
| ⑤ PAL/SECAM  0.8Vp-p (H) | ⑤ NTSC  0.7Vp-p (H) | ⑥ PAL/SECAM PAL : 0.8Vp-p (H) SECAM : 0.7Vp-p (H) | ⑥ NTSC 0.7Vp-p (H) | ⑦ PAL/SECAM PAL : 0.9Vp-p (H) SECAM : 0.8Vp-p (H) |
| ⑦ NTSC 0.8Vp-p (H) | ⑧ PAL/SECAM 0.7Vp-p (H) | ⑧ NTSC  0.7Vp-p (H) | ⑨ PAL/SECAM  0.7Vp-p (H) | ⑨ NTSC 0.7Vp-p (H) |
| ⑩ PAL/SECAM 3.4Vp-p (H) | ⑩ NTSC  3.5Vp-p (H) | ⑪ PAL  3.4Vp-p (H) | ⑪ SECAM  3.5Vp-p (H) | ⑪ NTSC  3.5Vp-p (H) |
| ⑫ PAL  3.5Vp-p (H) | ⑫ SECAM 3.5Vp-p (H) | ⑫ NTSC  3.5Vp-p (H) | ⑬  1.2Vp-p (H) | ⑭ 159Vp-p |
| ⑮ 1,200Vp-p | ⑯  1.8Vp-p | | | |

### C6 BOARD WAVEFORMS

| | | |
|---|---|---|
| ① PAL 122Vp-p (H) | ① SECAM 129Vp-p (H) | ① NTSC  127Vp-p (H) |
| ② PAL 127Vp-p (H) | ② SECAM 128Vp-p (H) | ② NTSC  125Vp-p (H) |
| ③ PAL  135Vp-p (H) | ③ SECAM 133Vp-p (H) | ③ NTSC 133Vp-p (H) |
| ④ 22.4Vp-p (H) | | |

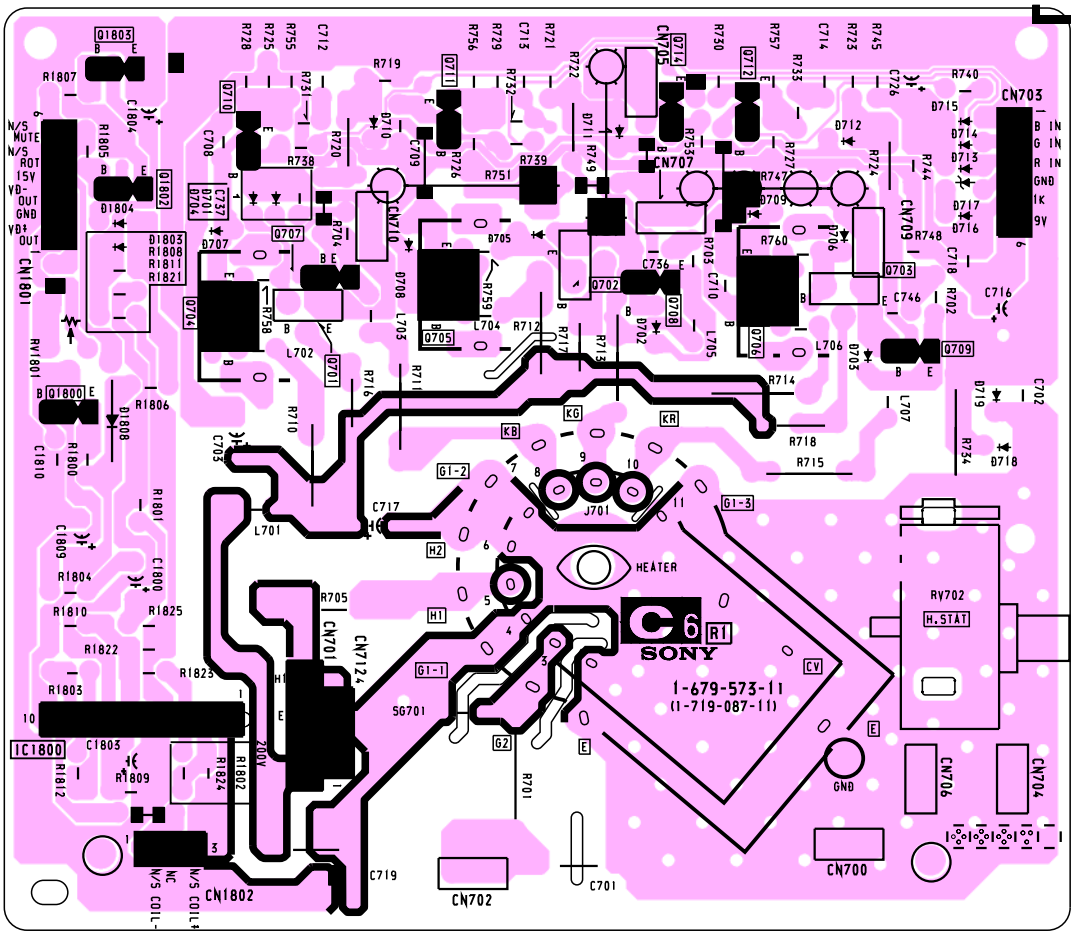
## 6-7. PRINTED WIRING BOARDS AND PARTS LOCATION

### PRINTED WIRING BOARDS

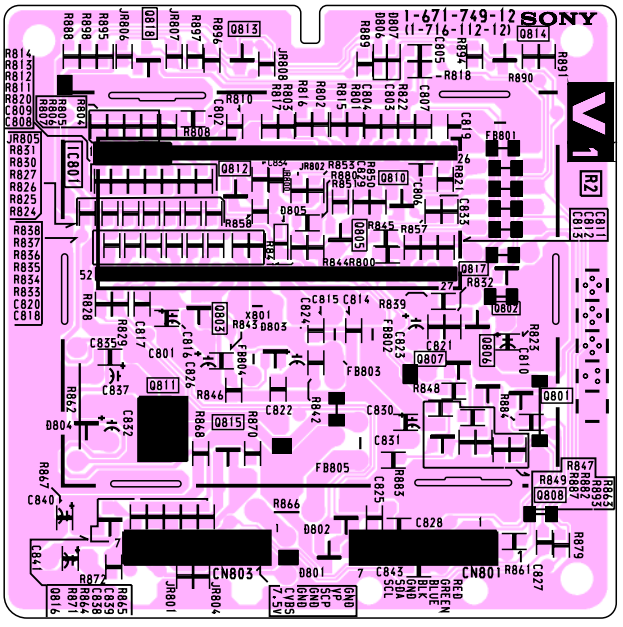
**C6** [VIDEO AMP, ROTATION CIRCUIT]

**V1** [TELETEXT]

**– C6 Board –**



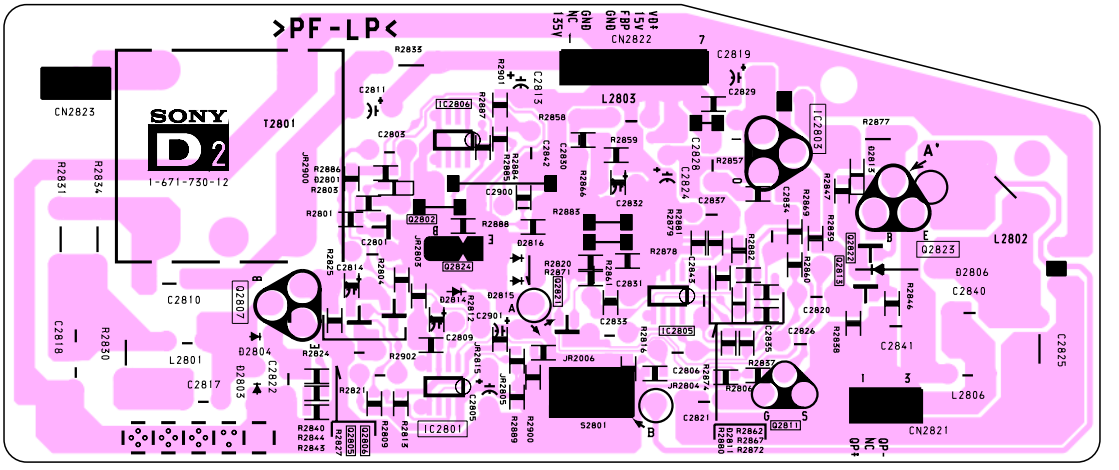

**– V1 Board – (KV-XA29M31/XA29M61/XA34M31)**



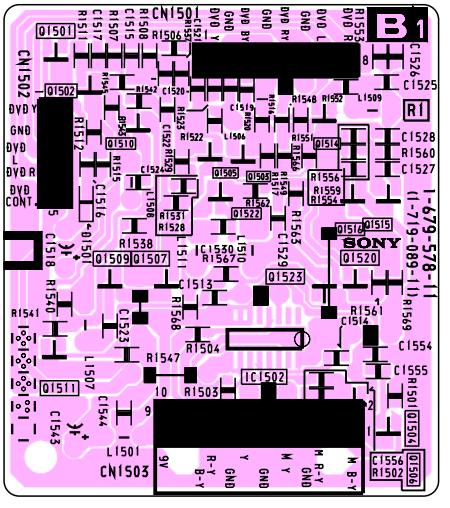
## PRINTED WIRING BOARDS

**D2** [DF, DQP DRIVE]  **B1** [DVD SWITCH]

### – D2 Board (For KV-XA34M31) –




### – B1 Board –

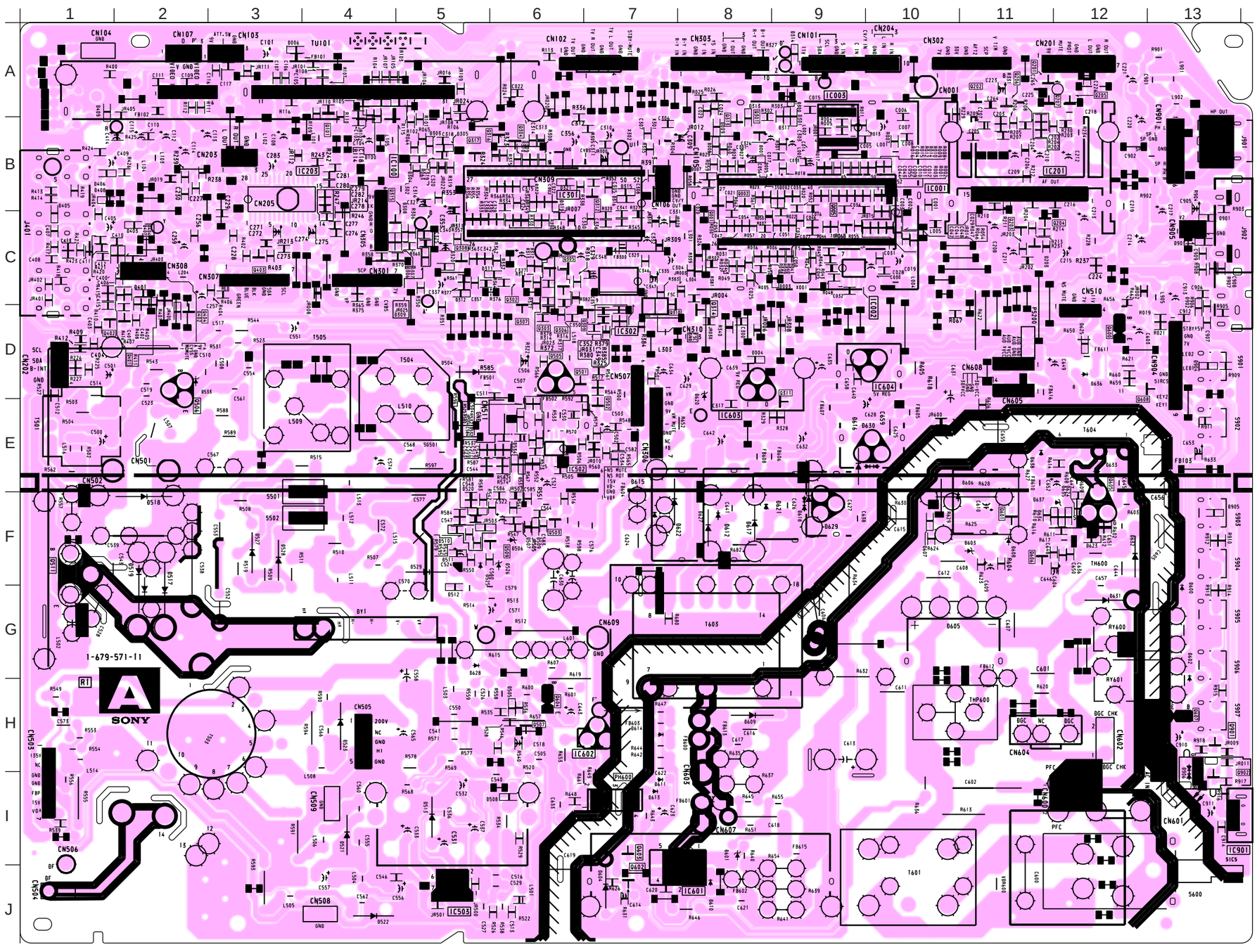


KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

## PRINTED WIRING BOARDS

**A** [SYSTEM CONTROLLER, Y/C JUNGLE,
DEFLECTION, TUVIF, FRONT AMP, POWER SUPPLY]

### – A Board




### A BOARD

**IC**

| | |
|---|---|
| IC001 | B-10 |
| IC002 | D-10 |
| IC003 | A-9 |
| IC100 | B-4 |
| IC201 | B-12 |
| IC203 | B-4 |
| IC301 | B-6 |
| IC302 | D-7 |
| IC502 | E-6 |
| IC503 | J-5 |
| IC601 | J-8 |
| IC602 | H-7 |
| IC603 | E-8 |
| IC604 | D-10 |
| IC901 | I-13 |

**TRANSISTOR**

| | |
|---|---|
| Q001 | C-8 |
| Q002 | B-8 |
| Q005 | B-9 |
| Q101 | B-4 |
| Q201 | A-11 |
| Q202 | A-11 |
| Q203 | C-11 |
| Q204 | C-11 |
| Q205 | A-12 |
| Q206 | A-11 |
| Q207 | A-12 |
| Q301 | A-8 |
| Q302 | C-6 |
| Q303 | D-6 |
| Q304 | B-6 |
| Q305 | C-6 |
| Q306 | D-6 |
| Q307 | D-6 |
| Q308 | C-5 |
| Q309 | D-7 |
| Q310 | D-7 |
| Q311 | D-9 |
| Q312 | B-7 |
| Q313 | B-8 |
| Q314 | D-8 |
| Q315 | B-4 |
| Q316 | B-5 |
| Q317 | B-5 |
| Q401 | D-2 |
| Q402 | D-1 |
| Q403 | C-3 |
| Q404 | D-2 |
| Q501 | D-6 |
| Q502 | E-7 |
| Q503 | F-6 |
| Q505 | D-6 |
| Q506 | E-2 |
| Q507 | H-6 |
| Q509 | F-6 |
| Q511 | F-1 |
| Q600 | D-12 |
| Q601 | F-11 |
| Q602 | I-7 |
| Q603 | I-7 |
| Q604 | H-6 |
| Q605 | E-12 |
| Q606 | F-11 |
| Q607 | H-13 |
| Q608 | D-12 |
| Q901 | H-13 |
| Q902 | H-13 |

**DIODE**

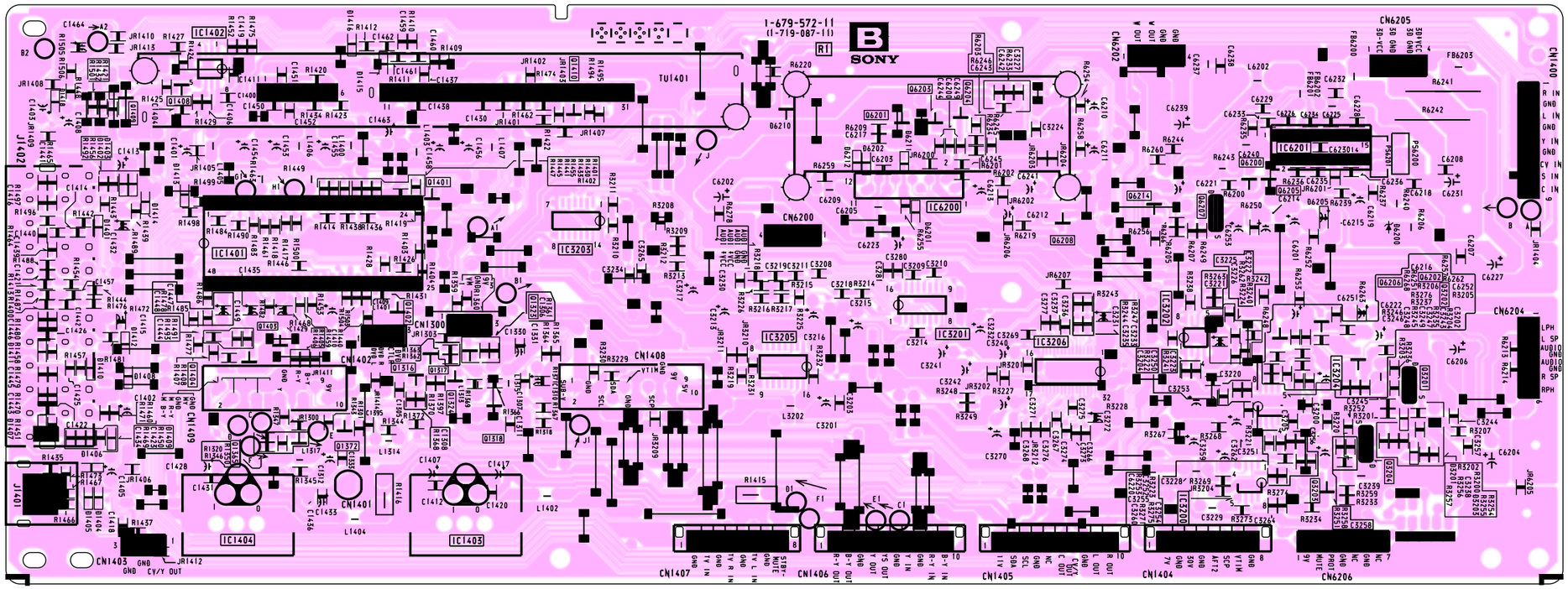
| | |
|---|---|
| D001 | B-8 |
| D003 | C-9 |
| D004 | D-8 |
| D005 | B-8 |
| D006 | A-3 |
| D007 | B-8 |
| D008 | B-8 |
| D009 | B-8 |
| D100 | B-4 |
| D203 | C-11 |
| D300 | A-9 |
| D301 | B-9 |
| D303 | B-5 |
| D304 | B-5 |
| D305 | B-5 |
| D306 | C-5 |
| D307 | C-5 |
| D308 | B-5 |
| D309 | D-5 |
| D312 | C-5 |
| D313 | A-8 |
| D314 | A-9 |
| D315 | B-7 |
| D317 | B-9 |
| D319 | B-6 |
| D320 | C-5 |
| D321 | B-6 |
| D322 | B-6 |
| D401 | C-2 |
| D402 | D-2 |
| D403 | C-2 |
| D404 | C-2 |
| D405 | B-1 |
| D406 | B-1 |
| D407 | C-2 |
| D408 | B-1 |
| D409 | A-1 |
| D504 | D-5 |
| D505 | H-6 |
| D506 | F-6 |
| D507 | F-6 |
| D508 | I7 |
| D509 | F-6 |
| D510 | F-5 |
| D511 | F-5 |
| D512 | G-5 |
| D513 | I-5 |
| D517 | F-2 |
| D518 | F-2 |
| D519 | F-2 |
| D520 | E-5 |
| D521 | I-4 |
| D522 | J-4 |
| D523 | H-4 |
| D525 | F-5 |
| D526 | F-6 |
| D527 | F-3 |
| D528 | F-3 |
| D529 | F-5 |
| D531 | E-6 |
| D533 | D-2 |
| D534 | E-6 |
| D600 | G-13 |
| D601 | I-8 |
| D602 | G-13 |
| D603 | F-11 |
| D604 | J-7 |
| D605 | G-10 |
| D606 | E-11 |
| D607 | F-10 |
| D608 | F-11 |
| D609 | H-8 |
| D610 | J-8 |
| D611 | I-7 |
| D612 | F-8 |
| D613 | I-7 |
| D616 | E-9 |
| D617 | F-8 |
| D618 | F-9 |
| D620 | D-8 |
| D621 | F-9 |
| D622 | F-8 |
| D623 | F-12 |
| D624 | F-12 |
| D625 | D-12 |
| D627 | F-8 |
| D628 | G-5 |
| D629 | F-9 |
| D630 | E-10 |
| D631 | G-10 |
| D632 | F-12 |
| D633 | E-12 |
| D634 | F-11 |
| D635 | F-12 |
| D636 | D-12 |
| D637 | F-11 |
| D638 | E-11 |
| D651 | E-7 |
| D901 | C-13 |
| D902 | C-13 |
| D903 | C-13 |
| D904 | C-13 |
| D905 | F-13 |
| D906 | H-13 |

KV-XA29M31/XA29M50/
XA29M61/XA34M31
RM-954

**B** [AUDIO PROCESSOR, AUDIO AMP, SUB TUNER, AV IN/OUT, VM DRIVER]

**H** [FRONT AV IN, SENSOR, POWER SW]

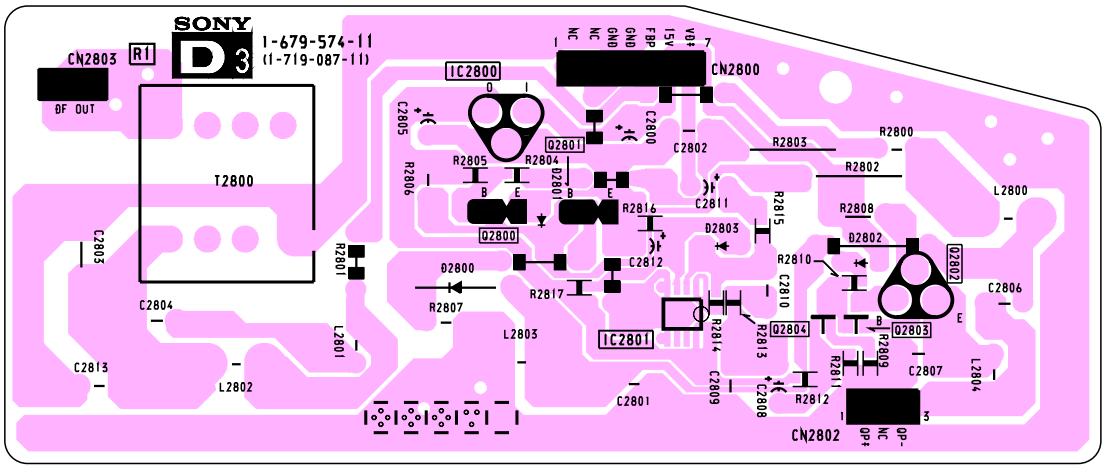
**– B Board –**



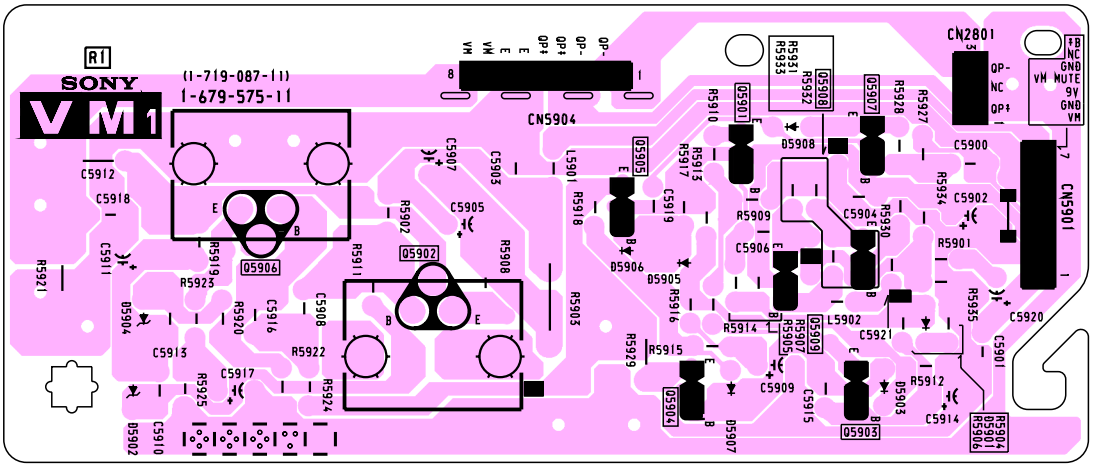
## PRINTED WIRING BOARDS

**D3** [DQP, DYNAMIC FOCUS] **VM1** [VELOCITY MODULATION]

### – D3 Board – (KV-XA29M31/XA29M50/XA29M61)



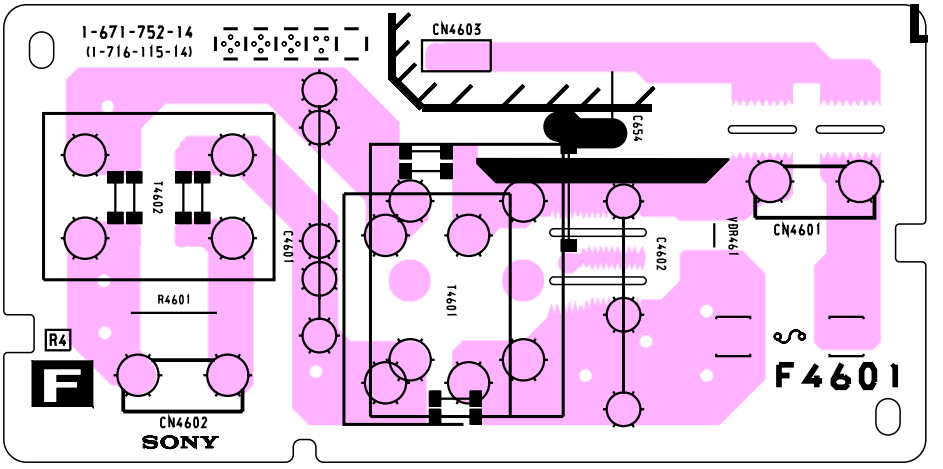

### – VM1 Board –



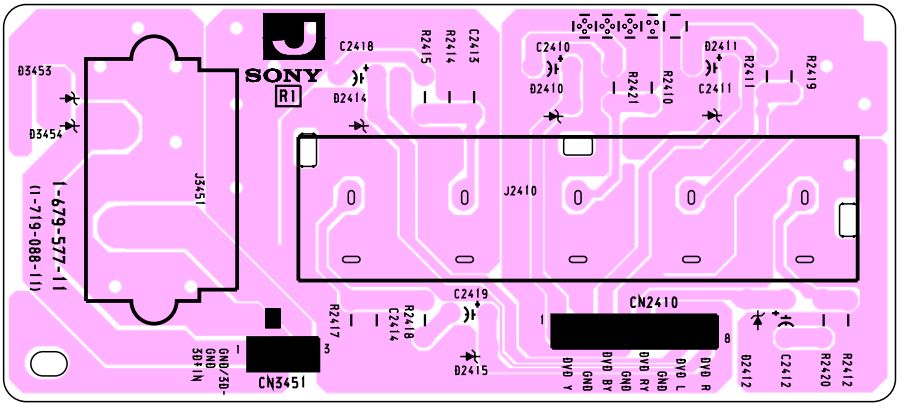
F [CISPR]

J [DVD, 3D TERMINAL]

**– F Board –**




**– J Board –**



## 6-8 SEMICONDUCTORS

DIODE

| | | | | | |
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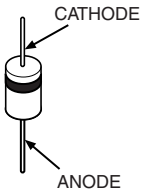
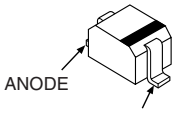
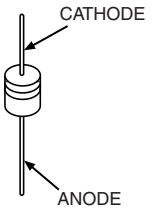
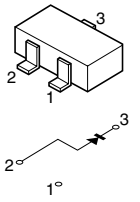
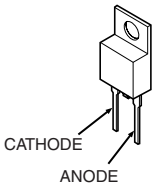
|  | |  |  |  |  |
| AK0AV0<br>AU-01Z-V1<br>D2L20U<br>EL1Z<br>ERA22-08<br>ERC06-15S<br>ERC04-06SE<br>GP08D<br>NNCD9.1A-T1 | RD33EBST<br>RD33EB3T<br>RDP10GPKG23<br>RGP02-17EL-6433<br>RU4AM-T4<br>RS3FS | DTZ-TT11-15B<br>DTZ10B<br>MA111-(K8).S0<br>RD5.1SB-T2<br>RD5.6S-B<br>RD9.1S-B<br>UDZS-TE17-10B<br>UDZ-TE17-5.1B<br>1SS355TE17 | D1N20R<br>D1NS4<br>NEQS04<br>RD6.1ES-B1<br>RD6.8ES-B1<br>RD20ES-B2<br>RD30ES-B2<br>RD39-ES-B2<br>1SS119-25 | D3.3M-B2<br>RD5.6M-T1B2<br>1SS302 | D5S6M |

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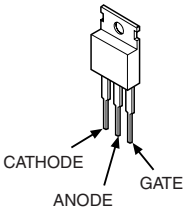
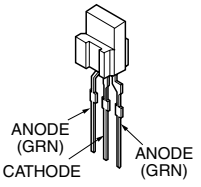
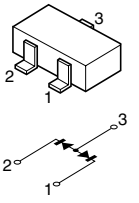
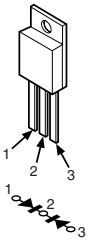
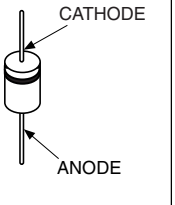
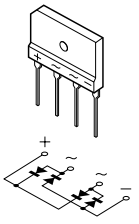
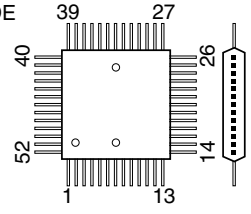
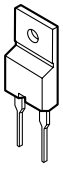
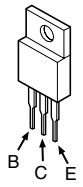
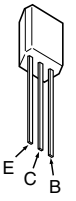
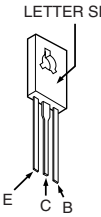
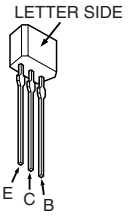
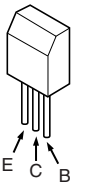
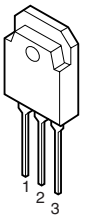
|  |  |  |  |  |  |
| TF541M<br>5P-6M | SPB-26MVWF | DAP202K | FMX-12S | D1NL20U-TR | D3SB60 |

| | | | |
|---|---|---|---|
| MARKING SIDE VIEW  | |  | |
| RU-1P | RN4Z | D3L60 | |

TRANSISTOR

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
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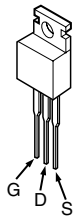
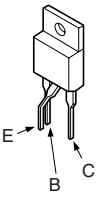
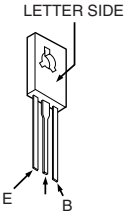
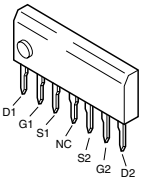
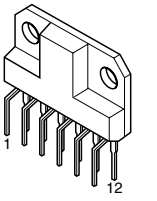
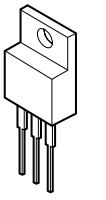
|  |  |  |  |  |  |
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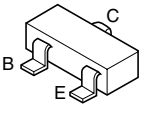
|  | |
| DTA114EKA-T149<br>DTC114EKA-T146<br>UN2213<br>UN2111 | 2SC2712-YG<br>2SC1623-L5L6<br>2SA1162-G<br>2SD2114K |

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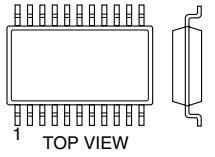
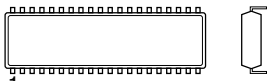
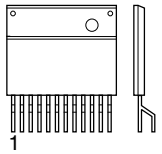
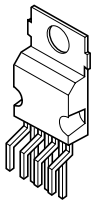
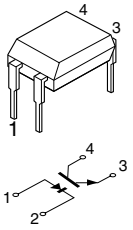
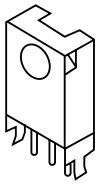
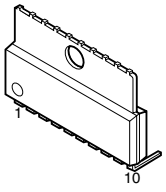
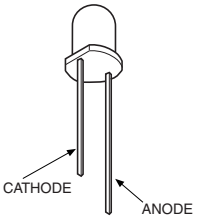
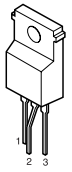
|---|---|---|---|---|
| SOP   TOP VIEW<br>Single In -line Package<br>Pin 8～98 | | DIP   TOP VIEW<br>Dual In-line Package<br>Pin 6～98 | | MARKING SIDE VIEW  <br>Zig-zag In -line Package<br>Pin 6～99 |
| BH3868AFS-E2<br>CXA1315M<br>HEF4053BT<br>LM358D<br>MM1319AFBE<br>NJUM4066BM | NJM2903M<br>UPC358G2-E2<br>UPC4588G2 | CXA1855S<br>M24C08-BN6<br>SAA5261<br>TDA9181T | | STR-F6656 |

| | | | | | |
|---|---|---|---|---|---|
|  |   |  |   |   |   |
| TDA8172 | ON3171-R | SBX3081-(01)30 | LA6510 | NJM78M09FA | SE-135N |

# SECTION 7
# EXPLODED VIEWS

**NOTE:**

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

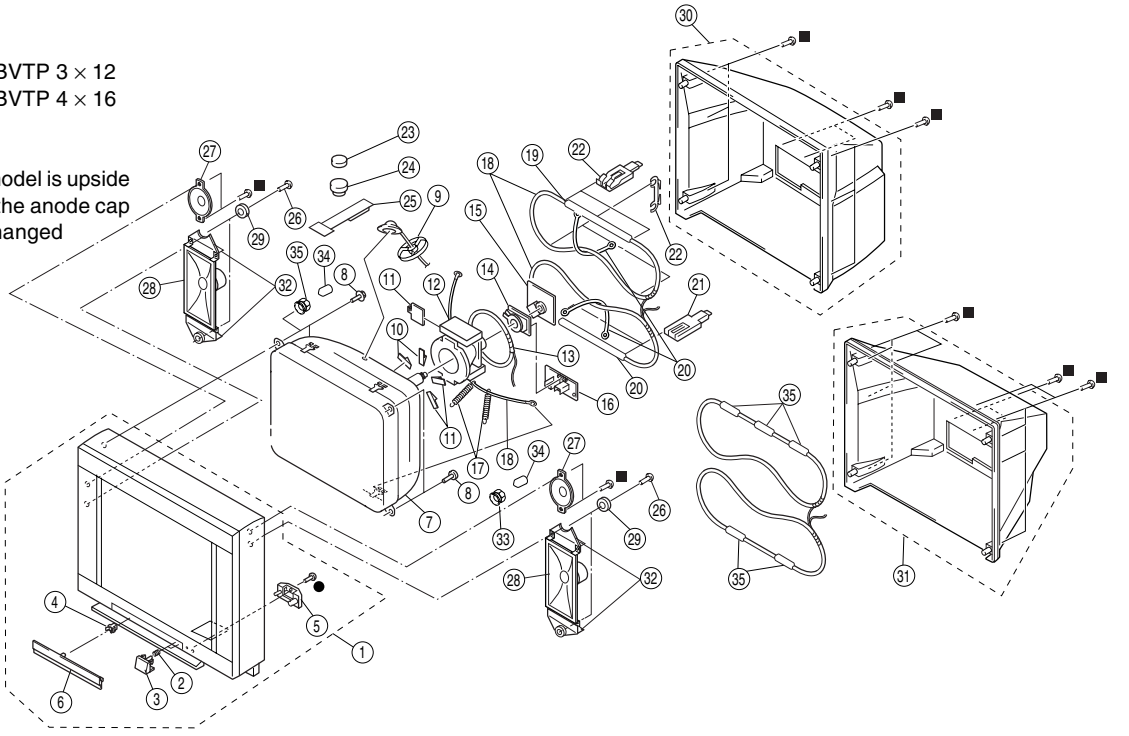
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

## 7-1. PICTURE TUBE

● : 7-685-648-79 SCREW +BVTP 3 × 12
■ : 7-685-663-71 SCREW +BVTP 4 × 16

**NOTE:**

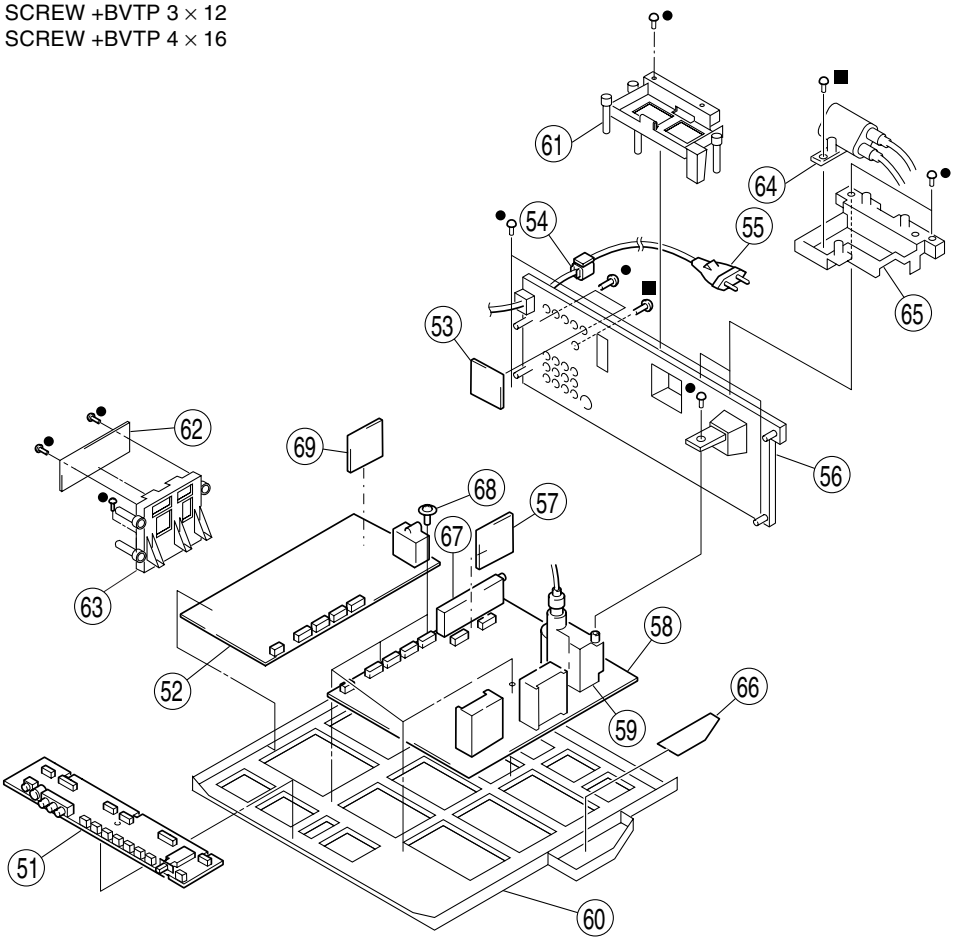
- The picture tube for OCE model is upside down, and the position for the anode cap and tension springs are changed accordingly. (KV-XA29M31 (OCE)/XA29M61 (OCE) and KV-XA34M31 (OCE)).



| REF. NO. | | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|---|
| 1 | | X-4038-355-1 | BEZNET ASSY (KV-XA29M31/M61) | 2 - 6 |
| | | X-4038-367-1 | BEZNET ASSY (KV-XA29M50) | 2 - 6 |
| | | X-4038-356-1 | BEZNET ASSY (KV-XA34M31) | 2 - 6 |
| 2 | | 4-036-405-11 | SPRING, COMPRESSION | |
| 3 | | 4-075-747-11 | BUTTON, POWER | |
| 4 | | 4-047-464-01 | CATCHER, PUSH | |
| 5 | * | 4-075-749-01 | GUIDE, LIGHT | |
| 6 | | 4-078-944-11 | CONTROL, DOOR (EXCEPT KV-XA29M50) | |
| | | 4-078-944-21 | CONTROL, DOOR (KV-XA29M50) | |
| 7 | ⚠ | 8-735-057-05 | PICTURE TUBE (M68LNH070X) (KV-XA29M31) | |
| | ⚠ | 8-735-056-05 | PICTURE TUBE (M68LNH070X) | |
| | | | (KV-XA29M50/M61) | |
| | ⚠ | 8-735-062-05 | PICTURE TUBE (A80LPD10X) (KV-XA34M31) | |
| 8 | | 4-046-765-12 | SCREW, TAPPING 7+CROWN WASHER (EXCEPT KV-XA34M31) | |
| 9 | * | 3-704-372-11 | HOLDER, HV CABLE | |
| 10 | | 4-046-600-11 | SPACER, DY | |
| 11 | | 4-077-228-01 | PIECE, TLH CONVERGENCE | |
| 12 | ⚠ | 8-451-494-31 | DEFLECTION YOKE (Y29RSA-S) | |
| | | | (EXCEPT KV-XA34M31) | |
| | ⚠ | 8-451-499-21 | DEFLECTION YOKE (Y34RSA-X) (KV-XA34M31) | |
| 13 | | 1-452-896-11 | COIL, NA ROTATION (RT200) (EXCEPT KV-XA34M31) | |
| | | 1-452-896-61 | COIL, NA ROTATION (RT200) (KV-XA34M31) | |
| 14 | | 8-453-011-11 | NA299-M (EXCEPT KV-XA34M31) | |
| | | 8-453-007-31 | NA324-M3 (KV-XA34M31) | |
| 15 | * | A-1332-110-A | C6 BOARD, MOUNTED (EXCEPT KV-XA34M31) | |
| | * | A-1332-128-A | C6 BOARD, MOUNTED (KV-XA34M31) | |
| 16 | * | A-1342-580-A | VM1 BOARD MOUNTED | |
| 17 | | 4-369-318-61 | SPRING, TENSION (EXCEPT KV-XA34M31) | |
| | | 4-078-766-01 | SPRING, EXTENSION (KV-XA34M31) | |
| 18 | ⚠ | 1-419-293-11 | COIL, DEGAUSSING (KV-XA34M31) | |
| | ⚠ | 1-419-323-11 | COIL, DEGAUSSING (EXCEPT KV-XA34M31) | |
| 19 | | 4-063-935-21 | CUSHION (50X550), DGC (EXCEPT KV-XA34M31) | |
| 20 | | 4-068-028-32 | BAND, DGC (EXCEPT KV-XA34M31) | |
| | | 4-067-455-01 | BAND, DGC (KV-XA34M31) | |
| 21 | * | 4-062-970-12 | CLIP (29RSN), DGC (EXCEPT KV-XA34M31) | |
| | * | 4-069-493-12 | CLIP, DGC (KV-XA34M31) | |
| 22 | | 4-064-883-03 | HOLDER, DGC (EXCEPT KV-XA34M31) | |
| | | 4-061-369-01 | HOLDER, DEGAUSE COIL (KV-XA34M31) | |
| 23 | | 1-452-032-00 | MAGNET,DISC | |
| 24 | | 1-452-094-00 | CIRCULAR DISC MAGNET B | |
| 25 | | X-4387-214-3 | PERMALOY ASSY, CORRECTION | |
| 26 | | 4-302-404-03 | SCREW (WASHER HEAD) (+P 4X16) | |
| 27 | | 1-529-190-11 | SPEAKER (5CM) | |
| 28 | | 1-529-563-11 | SPEAKER (15X6.5CM) | |
| 29 | | 4-374-745-21 | CUSHION (A) | |
| 30 | ⚠ | X-4038-161-1 | REAR COVER ASSY (EXCEPT KV-XA34M31) (■12) | |
| 31 | ⚠ | X-4038-310-1 | REAR COVER ASSY (KV-XA34M31) (■ 14) | |
| 32 | * | 4-046-981-01 | BRACKET, SPEAKER | |
| 33 | | 4-387-204-01 | NUT, SPECIAL, CRT (KV-XA34M31) | |
| 34 | | 4-074-060-01 | CAP SCREW (KV-XA34M31) | |
| 35 | * | 4-074-512-21 | CUSHION (S) DGC (KV-XA34M31) | |

## 7-2. CHASSIS

● : 7-685-648-79 SCREW +BVTP 3 × 12
■ : 7-685-663-71 SCREW +BVTP 4 × 16




| REF. NO. | | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|---|
| 51 | * | A-1372-887-A | H BOARD, MOUNTED | |
| 52 | * | A-1136-144-A | B BOARD, COMPLETE (EXCEPT KV-XA34M31) | |
| | * | A-1136-170-A | B BOARD, COMPLETE (KV-XA34M31 ONLY) | |
| 53 | * | A-1388-288-A | J BOARD, MOUNTED | |
| 54 | ⚠ | 4-022-115-00 | HOLDER, AC CORD | |
| 55 | ⚠ | 1-574-358-11 | CORD, POWER (WITH CONNECTOR) 7.5A/250V | |
| | | | (KV-XA29M31/XA34M31) | |
| | ⚠ | 1-574-062-11 | CORD, POWER (WITH CONNECTOR) 2.5A/250V | |
| | | | (KV-XA29M50/M61) | |
| 56 | * | 4-075-447-31 | BRACKET, TERMINAL | |
| 57 | * | A-1347-164-A | V1 BOARD, COMPLETE (EXCEPT KV-XA29M50) | |
| 58 | * | A-1299-358-A | A BOARD, COMPLETE (KV-XA29M31) | |
| | * | A-1299-363-A | A BOARD, COMPLETE (KV-XA29M50) | |
| | * | A-1299-367-A | A BOARD, COMPLETE (KV-XA29M61) | |
| | * | A-1299-368-A | A BOARD, COMPLETE (KV-XA34M31) | |
| 59 | ⚠ | 1-453-284-11 | TRANSFORMER ASSY, FLYBACK | |
| | | | (NX-4009//M3I4) (EXCEPT KV-XA34M31) | |
| | ⚠ | 1-453-298-31 | TRANSFORMER ASSY, FLYBACK | |
| | | | (NX-4009//M3P4) (KV-XA34M31) | |
| 60 | * | 4-066-681-05 | BRACKET, MAIN (6 SCREWS (3X12), (+ BVTAP) | |

| REF. NO. | | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|---|
| 61 | * | 4-066-683-11 | HOLDER, PWB (EXCEPT KV-XA29M50) | |
| 62 | * | A-1241-443-A | F BOARD, MOUNTED | |
| 63 | * | 4-066-682-01 | BRACKET, F PWB | |
| 64 | ⚠ | 1-467-525-31 | CAP BLOCK, HIGH-VOLTAGE | |
| | | | (KV-XA34M31 ONLY) | |
| 65 | | 4-866-680-02 | BRACKET, HVC (KV-XA34M31 ONLY) | |
| 66 | * | A-1343-946-A | D3 BOARD, MOUNTED (EXCEPT KV-XA34M31) | |
| | * | A-1343-979-A | D2 BOARD, MOUNTED (KV-XA34M31) | |
| 67 | | 8-598-451-00 | TUNER, FSS BTF-WG441 | |
| | | | (EXCEPT KV-XA29M50) | |
| | | 8-598-449-100 | TUNER, FSS BTF-LG433 (KV-XA29M50) | |
| 68 | | 4-046-797-01 | SCREW (3X12), (+)BVTAP | |
| 69 | * | A-1131-652-A | B1 BOARD, MOUNTED | |

# SECTION 10
# ELECTRICAL PARTS LIST

**A**

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | * A-1299-358-A | A BOARD COMPLETE (KV-XA29M31) | | | |
| | * A-1299-363-A | A BOARD COMPLETE (KV-XA29M50) | | | |
| | * A-1299-367-A | A BOARD COMPLETE (KV-XA29M61) | | | |
| | * A-1299-368-A | A BOARD COMPLETE (KV-XA34M31) | | | |
| | | ********** | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | 4-382-854-21 | SCREW (M3X14), P, SW (+) | | | |
| | | <CAPACITOR> | | | |
| C004 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10.00% 50V | |
| C005 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10.00% 50V | |
| C006 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C007 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V | |
| C013 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% 50V | |
| C014 | 1-104-664-11 | ELECT | 47UF | 20.00% 25V | |
| C015 | 1-163-009-11 | CERAMIC CHIP | 0.001UF | 10.00% 50V | |
| C016 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5.00% 50V | |
| C017 | 1-163-113-00 | CERAMIC CHIP | 68PF | 5.00% 50V | |
| C019 | 1-104-664-11 | ELECT | 47UF | 20.00% 25V | |
| C020 | 1-163-259-91 | CERAMIC CHIP | 220PF | 5.00% 50V | |
| C022 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF 50V | |
| C023 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF 50V | |
| C024 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF 50V | |
| C026 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C027 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C028 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% 50V | |
| C030 | 1-126-965-11 | ELECT | 22UF | 20.00% 50V | |
| C031 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C032 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% 16V | |
| C041 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C042 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C043 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C044 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C047 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C048 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C050 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C051 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C053 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V | |
| C056 | 1-163-263-11 | CERAMIC CHIP | 330PF | 5.00% 50V | |
| C103 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C104 | 1-104-665-11 | ELECT | 100UF | 20.00% 10V | |
| C107 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10.00% 50V | |
| C108 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V | |
| C109 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10.00% 50V | |
| C110 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10.00% 50V | |
| C111 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10.00% 50V | |
| C112 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V | |
| C113 | 1-104-664-11 | ELECT | 47UF | 20.00% 25V | |
| C114 | 1-126-967-11 | ELECT | 47UF | 20.00% 50V | |
| C118 | 1-110-501-11 | CERAMIC CHIP | 0.33UF | 10.00% 16V | |
| C300 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | 16V | |
| C301 | 1-126-935-11 | ELECT | 470UF | 20.00% 16V | |
| C302 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10.00% 50V | |
| C303 | 1-126-959-11 | ELECT | 0.47UF | 20.00% 50V | |
| C304 | 1-126-967-11 | ELECT | 47UF | 20.00% 50V | |
| C305 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C306 | 1-163-233-11 | CERAMIC CHIP | 18PF | 5.00% 50V | |
| C307 | 1-163-233-11 | CERAMIC CHIP | 18PF | 5.00% 50V | |
| C308 | 1-163-259-91 | CERAMIC CHIP | 220PF | 5.00% 50V | |
| C309 | 1-126-957-11 | ELECT | 0.22UF | 20.00% 50V | |
| C311 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V | |
| C312 | 1-164-346-11 | CERAMIC CHIP | 1UF | 16V | |
| C313 | 1-164-346-11 | CERAMIC CHIP | 1UF | 16V | |
| C314 | 1-164-346-11 | CERAMIC CHIP | 1UF | 16V | |
| C315 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C316 | 1-126-934-11 | ELECT (EXCEPT KV-XA34M31) | 220UF | 20.00% 16V | |
| C316 | 1-104-664-11 | ELECT (KV-XA34M31 ONLY) | 47UF | 20.00% 25V | |
| C317 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C318 | 1-163-031-11 | CERAMIC CHIP | 0.01UF | 50V | |
| C319 | 1-163-031-11 | CERAMIC CHIP | 0.01UF | 50V | |
| C320 | 1-163-031-11 | CERAMIC CHIP | 0.01UF | 50V | |
| C321 | 1-164-489-11 | CERAMIC CHIP (EXCEPT KV-XA34M31) | 0.22UF | 10.00% 16V | |
| C322 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10.00% 50V | |
| C324 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% 50V | |
| C325 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V | |
| C327 | 1-126-965-11 | ELECT | 22UF | 20.00% 50V | |
| C328 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C329 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V | |
| C330 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C331 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V | |
| C332 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V | |
| C335 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C336 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C337 | 1-126-961-11 | ELECT | 2.2UF | 20.00% 50V | |
| C341 | 1-115-340-11 | CERAMIC CHIP | 0.22UF | 10.00% 25V | |
| C342 | 1-163-259-91 | CERAMIC CHIP | 220PF | 5.00% 50V | |
| C347 | 1-126-933-11 | ELECT | 100UF | 20.00% 16V | |
| C348 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C349 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C350 | 1-163-031-11 | CERAMIC CHIP | 0.01UF | 50V | |
| C351 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A

| REF. NO. | PART NO. | DESCRIPTION | | REMARK |
|---|---|---|---|---|
| C352 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| C353 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V |
| C356 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V |
| C357 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| C502 | 1-163-145-00 | CERAMIC CHIP | 0.0015UF | 5.00% 50V |
| C503 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V |
| C504 | 1-163-007-11 | CERAMIC CHIP | 680PF | 10.00% 50V |
| | | (KV-XA34M31 ONLY) | | |
| C506 | 1-107-638-11 | ELECT | 33UF | 20.00% 160V |
| C507 | 1-161-830-00 | CERAMIC | 0.0047UF | 500V |
| | | (EXCEPT KV-XA34M31) | | |
| C507 | 1-102-244-00 | CERAMIC | 220PF | 10.00% 500V |
| | | (KV-XA34M31 ONLY) | | |
| C510 | 1-102-112-00 | CERAMIC | 330PF | 10.00% 50V |
| | | (EXCEPT KV-XA34M31) | | |
| C510 | 1-102-074-00 | CERAMIC | 0.001UF | 10.00% 50V |
| | | (KV-XA34M31 ONLY) | | |
| C512 | 1-163-989-11 | CERAMIC CHIP | 0.033UF | 10.00% 25V |
| C513 | 1-163-263-11 | CERAMIC CHIP | 330PF | 5.00% 50V |
| | | (EXCEPT KV-XA34M31) | | |
| C513 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% 50V |
| | | (KV-XA34M31 ONLY) | | |
| C514 | 1-106-383-00 | MYLAR | 0.047UF | 10.00% 200V |
| C517 | 1-164-182-11 | CERAMIC CHIP | 0.0033UF | 10.00% 50V |
| C518 | 1-126-933-11 | ELECT | 100UF | 20.00% 16V |
| C519 | 1-102-212-00 | CERAMIC | 820PF | 10.00% 500V |
| C521 | 1-104-666-11 | ELECT | 220UF | 20.00% 25V |
| C522 | 1-126-933-11 | ELECT | 100UF | 20.00% 16V |
| C523 | 1-102-002-00 | CERAMIC | 680PF | 10.00% 500V |
| | | (EXCEPT KV-XA34M31) | | |
| C523 | 1-162-318-11 | CERAMIC | 0.001UF | 10.00% 500V |
| | | (KV-XA34M31 ONLY) | | |
| C524 | 1-126-967-11 | ELECT | 47UF | 20.00% 50V |
| C526 | 1-130-495-00 | MYLAR | 0.1UF | 5.00% 50V |
| C527 | 1-102-820-00 | CERAMIC | 330PF | 5.00% 50V |
| C528 | 1-162-116-00 | CERAMIC | 680PF | 10.00% 2KV |
| C530 | 1-137-372-11 | MYLAR | 0.022UF | 5.00% 50V |
| C531 | 1-107-903-11 | ELECT | 2.2UF | 20.00% 50V |
| C532 | 1-128-528-11 | ELECT | 470UF | 20.00% 25V |
| C533 | 1-128-528-11 | ELECT | 470UF | 20.00% 25V |
| C534 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| C536 | 1-130-495-00 | MYLAR | 0.1UF | 5.00% 50V |
| C537 | 1-107-911-11 | ELECT | 220UF | 20.00% 50V |
| C538 | 1-127-717-11 | CAP, METALIZED PP FILM | | 19000PF |
| | | (EXCEPT KV-XA34M31) | | |
| C538 | 1-136-544-11 | FILM | 0.023UF | 3.00% 2KV |
| | | (KV-XA34M31 ONLY) | | |
| C539 | 1-129-723-00 | FILM | 0.056UF | 5.00% 630V |
| | | (EXCEPT KV-XA34M31) | | |
| C539 | 1-130-118-91 | FILM | 0.051UF | 5.00% 400V |
| | | (KV-XA34M31 ONLY) | | |
| C540 | 1-136-171-00 | FILM | 0.33UF | 5.00% 50V |
| C543 | 1-162-116-00 | CERAMIC | 680PF | 10.00% 2KV |
| | | (KV-XA34M31 ONLY) | | |
| C546 | 1-165-319-11 | CERAMIC CHIP | 0.1UF | 50V |
| C549 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% 50V |
| C550 | 1-106-220-00 | MYLAR | 0.1UF | 10.00% 100V |
| C551 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V |
| C552 | 1-162-116-00 | CERAMIC | 680PF | 10.00% 2KV |
| C553 | 1-162-116-00 | CERAMIC | 680PF | 10.00% 2KV |

| REF. NO. | PART NO. | DESCRIPTION | | REMARK |
|---|---|---|---|---|
| C554 | 1-137-417-11 | MYLAR | 0.0047UF | 10.00% 200V |
| | | (EXCEPT KV-XA34M31) | | |
| C554 | 1-106-361-00 | MYLAR | 0.0056UF | 10.00% 100V |
| | | (KV-XA34M31 ONLY) | | |
| C556 | 1-128-528-11 | ELECT | 470UF | 20.00% 25V |
| C557 | 1-126-941-11 | ELECT | 470UF | 20.00% 25V |
| C558 | 1-123-024-21 | ELECT | 33UF | 160V |
| C560 | 1-102-228-00 | CERAMIC | 470PF | 10.00% 500V |
| C561 | 1-129-898-00 | FILM | 0.0022UF | 5.00% 630V |
| | | (EXCEPT KV-XA34M31) | | |
| C561 | 1-129-928-00 | FILM | 0.0027UF | 5.00% 630V |
| | | (KV-XA34M31 ONLY) | | |
| C562 | 1-102-228-00 | CERAMIC | 470PF | 10.00% 500V |
| C563 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| | | (EXCEPT KV-XA34M31) | | |
| C563 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% 50V |
| | | (KV-XA34M31 ONLY) | | |
| C564 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | 25V |
| C565 | 1-107-655-11 | ELECT | 47UF | 20.00% 250V |
| C566 | 1-102-244-00 | CERAMIC | 220PF | 10.00% 500V |
| C567 | 1-115-520-11 | FILM | 0.68UF | 5.00% 250V |
| | | (EXCEPT KV-XA34M31) | | |
| C567 | 1-109-961-11 | FILM | 0.75UF | 5.00% 250V |
| | | (KV-XA34M31 ONLY) | | |
| C568 | 1-102-228-00 | CERAMIC | 470PF | 10.00% 500V |
| C570 | 1-115-522-11 | FILM | 1UF | 5.00% 250V |
| | | (EXCEPT KV-XA34M31) | | |
| C570 | 1-117-674-71 | FILM | 1.8UF | 5.00% 250V |
| | | (KV-XA34M31 ONLY) | | |
| C572 | 1-117-661-21 | FILM | 0.15UF | 5.00% 250V |
| | | (EXCEPT KV-XA34M31) | | |
| C572 | 1-115-514-11 | FILM | 0.22UF | 5.00% 250V |
| | | (KV-XA34M31 ONLY) | | |
| C573 | 1-106-387-00 | MYLAR | 0.068UF | 10.00% 200V |
| C574 | 1-104-709-11 | ELECT | 4.7UF | 160V |
| C576 | 1-130-495-00 | MYLAR | 0.1UF | 5.00% 50V |
| C577 | 1-106-395-00 | MYLAR | 0.15UF | 10.00% 200V |
| | | (EXCEPT KV-XA34M31) | | |
| C577 | 1-115-516-11 | FILM | 0.33UF | 5.00% 250V |
| | | (KV-XA34M31 ONLY) | | |
| C582 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| | | (EXCEPT KV-XA34M31) | | |
| C584 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| | | (EXCEPT KV-XA34M31) | | |
| C586 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| | | (EXCEPT KV-XA34M31) | | |
| C586 | 1-216-295-11 | SHORT | 0 (KV-XA34M31 ONLY) | |
| C600 | ⚠ 1-104-705-11 | MYLAR | 0.1UF | 20.00% 250V |
| C601 | 1-129-720-00 | FILM | 0.033UF | 5.00% 630V |
| C602 | ⚠ 1-104-705-11 | MYLAR | 0.1UF | 20.00% 250V |
| C603 | 1-126-967-11 | ELECT | 47UF | 20.00% 50V |
| C604 | 1-163-009-11 | CERAMIC CHIP | 0.001UF | 10.00% 50V |
| C605 | ⚠ 1-119-886-51 | CERAMIC | 470PF | 10.00% 250V |
| C606 | ⚠ 1-119-886-51 | CERAMIC | 470PF | 10.00% 250V |
| C607 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% 500V |
| C608 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% 500V |
| C609 | 1-126-968-11 | ELECT | 100UF | 20.00% 50V |
| C610 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V |
| C611 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% 500V |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A

| REF. NO. | | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|---|
| C612 | | 1-161-830-00 | CERAMIC | 0.0047UF | 99% 500V | |
| C613 | | 1-125-906-11 | ELECT | 560UF | 20.00% 450V | |
| C614 | | 1-126-964-11 | ELECT | 10UF | 20.00% 50V | |
| C615 | ⚠ | 1-119-886-51 | CERAMIC | 470PF | 10.00% 250V | |
| C616 | ⚠ | 1-130-202-00 | FILM | 0.022UF | 5.00% 400V | |
| C617 | | 1-107-792-11 | CERAMIC | 100PF | 5.00% 1KV | |
| C618 | | 1-125-893-11 | FILM | 680PF | 3.00% 1.5KV | |
| C619 | ⚠ | 1-119-886-51 | CERAMIC | 470PF | 10.00% 250V | |
| C620 | | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% 50V | |
| C621 | | 1-102-114-00 | CERAMIC | 470PF | 10.00% 50V | |
| C622 | | 1-102-119-00 | CERAMIC | 0.0015UF | 10.00% 50V | |
| C623 | | 1-104-665-11 | ELECT | 100UF | 20.00% 25V | |
| C624 | | 1-104-331-11 | CERAMIC (EXCEPT KV-XA34M31) | 0.0022UF | 10.00% 1KV | |
| C624 | | 1-125-772-91 | CERAMIC (KV-XA34M31 ONLY) | 1500PF | 10.00% 2KV | |
| C626 | | 1-102-002-00 | CERAMIC | 680PF | 10.00% 500V | |
| C629 | | 1-126-964-11 | ELECT | 10UF | 20.00% 50V | |
| C630 | | 1-124-347-51 | ELECT (EXCEPT KV-XA34M31) | 100UF | 20.00% 160V | |
| C630 | | 1-125-494-11 | ELECT(BLOCK) (KV-XA34M31 ONLY) | 560UF | 20.00% 160V | |
| C631 | | 1-128-550-11 | ELECT | 2200UF | 20.00% 50V | |
| C632 | | 1-128-339-11 | ELECT (EXCEPT KV-XA34M31) | 2200UF | 20.00% 16V | |
| C632 | | 1-126-936-11 | ELECT (KV-XA34M31 ONLY) | 3300UF | 20.00% 16V | |
| C633 | | 1-104-999-11 | MYLAR | 0.1UF | 10.00% 200V | |
| C634 | | 1-126-933-11 | ELECT (EXCEPT KV-XA34M31) | 100UF | 20.00% 16V | |
| C634 | | 1-126-934-11 | ELECT (KV-XA34M31 ONLY) | 220UF | 20.00% 16V | |
| C635 | | 1-104-665-11 | ELECT | 100UF | 20.00% 10V | |
| C636 | | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% 50V | |
| C638 | | 1-161-830-00 | CERAMIC | 0.0047UF | 500V | |
| C641 | | 1-102-002-00 | CERAMIC | 680PF | 10.00% 500V | |
| C642 | | 1-126-943-11 | ELECT | 2200UF | 20.00% 25V | |
| C643 | | 1-126-933-11 | ELECT | 100UF | 20.00% 16V | |
| C644 | | 1-104-331-11 | CERAMIC | 0.0022UF | 10.00% 1KV | |
| C645 | | 1-137-605-11 | MYLAR | 0.01UF | 10.00% 250V | |
| C646 | | 1-107-679-91 | ELECT | 10UF | 20.00% 450V | |
| C647 | | 1-163-275-11 | CERAMIC CHIP | 0.001UF | 5.00% 50V | |
| C649 | | 1-126-940-11 | ELECT | 330UF | 20.00% 25V | |
| C650 | | 1-163-275-11 | CERAMIC CHIP | 0.001UF | 5.00% 50V | |
| C651 | | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% 50V | |
| C652 | | 1-126-965-11 | ELECT | 22UF | 20.00% 50V | |
| C653 | | 1-126-967-11 | ELECT | 47UF | 20.00% 50V | |
| C655 | ⚠ | 1-119-886-51 | CERAMIC | 470PF | 10.00% 250V | |
| C657 | | 1-101-821-00 | CERAMIC | 0.0022UF | 500V | |
| C659 | | 1-162-116-00 | CERAMIC (EXCEPT KV-XA34M31) | 680PF | 10.00% 2KV | |
| C659 | | 1-162-115-00 | CERAMIC (KV-XA34M31 ONLY) | 330PF | 10.00% 2KV | |
| C912 | | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V | |
| C913 | | 1-104-665-11 | ELECT | 100UF | 20.00% 10V | |

<CONNECTOR>

| | | | |
|---|---|---|---|
| CN101 | * | 1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P |
| CN102 | * | 1-779-889-11 | CONNECTOR, BOARD TO BOARD 8P |
| CN104 | | 1-695-915-11 | TAB (CONTACT) |
| CN105 | | 1-695-915-11 | TAB (CONTACT) |
| CN106 | * | 1-564-506-11 | PLUG, CONNECTOR 3P |
| CN201 | * | 1-564-508-11 | PLUG, CONNECTOR 5P |
| CN202 | * | 1-508-847-00 | PIN, CONNECTOR 4P |
| CN301 | * | 1-774-813-11 | CONNECTOR, BOARD TO BOARD 7P (EXCEPT KV-XA29M50) |
| CN303 | * | 1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P |
| CN305 | * | 1-564-509-11 | PLUG, CONNECTOR 6P |
| CN306 | | 1-564-507-11 | PLUG, CONNECTOR 4P |
| CN307 | * | 1-774-813-11 | CONNECTOR, BOARD TO BOARD 7P (EXCEPT KV-XA29M50) |
| CN501 | * | 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P (EXCEPT KV-XA34M31) |
| CN502 | * | 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P (EXCEPT KV-XA34M31) |
| CN503 | * | 1-564-510-11 | PLUG, CONNECTOR 7P |
| CN504 | | 1-695-915-11 | TAB (CONTACT) |
| CN505 | * | 1-564-508-11 | PLUG, CONNECTOR 5P |
| CN507 | * | 1-564-509-11 | PLUG, CONNECTOR 6P |
| CN508 | | 1-695-915-11 | TAB (CONTACT) (KV-XA34M31 ONLY) |
| CN509 | | 1-695-915-11 | TAB (CONTACT) (KV-XA34M31 ONLY) |
| CN601 | * | 1-580-843-11 | PIN, CONNECTOR (POWER) |
| CN602 | * | 1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P |
| CN603 | * | 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P |
| CN604 | * | 1-691-134-11 | PIN, CONNECTOR (PC BOARD) 2P |
| CN608 | * | 1-564-507-11 | PLUG, CONNECTOR 4P |
| CN904 | * | 1-564-512-11 | PLUG, CONNECTOR 9P |

<DIODE>

| | | | |
|---|---|---|---|
| D001 | | 8-719-988-61 | 1SS355TE-17 |
| D002 | | 8-719-988-61 | 1SS355TE-17 |
| D004 | | 1-216-295-11 | SHORT 0 |
| D005 | | 8-719-988-61 | 1SS355TE-17 |
| D006 | | 1-216-295-11 | SHORT 0 |
| D007 | | 8-719-988-61 | 1SS355TE-17 |
| D008 | | 8-719-988-61 | 1SS355TE-17 |
| D009 | | 8-719-988-61 | 1SS355TE-17 |
| D100 | | 8-719-988-61 | 1SS355TE-17 (EXCEPT KV-XA29M50) |
| D300 | | 1-216-295-11 | SHORT 0 |
| D301 | | 8-719-988-61 | 1SS355TE-17 |
| D306 | | 8-719-988-61 | 1SS355TE-17 |
| D307 | | 8-719-988-61 | 1SS355TE-17 |
| D308 | | 8-719-988-61 | 1SS355TE-17 |
| D309 | | 8-719-159-10 | RD5.1SB-T2 |
| D311 | | 8-719-988-61 | 1SS355TE-17 |
| D312 | | 8-719-988-61 | 1SS355TE-17 |
| D313 | | 8-719-988-61 | 1SS355TE-17 |
| D315 | | 8-719-988-61 | 1SS355TE-17 (KV-XA34M31 ONLY) |
| D316 | | 8-719-037-06 | RD7.5SB1-T1 (EXCEPT KV-XA34M31) |
| D316 | | 8-719-158-35 | RD9.1S-B (KV-XA34M31 ONLY) |
| D320 | | 8-719-158-35 | RD9.1S-B |
| D321 | | 8-719-158-35 | RD9.1S-B |
| D504 | | 8-719-302-43 | EL1Z |
| D505 | | 8-719-988-61 | 1SS355TE-17 |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| D506 | 8-719-911-19 | 1SS119-25 | |
| D507 | 8-719-988-61 | 1SS355TE-17 | |
| D508 | 8-719-988-61 | 1SS355TE-17 | |
| D509 | 1-216-073-00 | RES-CHIP 10K 5% 1/10W | |
| | | (EXCEPT KV-XA34M31) | |
| D509 | 8-719-158-15 | RD5.6S-B (KV-XA34M31 ONLY) | |
| D510 | 8-719-988-61 | 1SS355TE-17 | |
| D511 | 8-719-988-61 | 1SS355TE-17 | |
| D512 | 8-719-988-61 | 1SS355TE-17 | |
| D513 | 8-719-908-03 | GP08D | |
| D517 | 8-719-945-80 | ERC06-15S (EXCEPT KV-XA34M31) | |
| D517 | 8-719-945-80 | ERC06-15S (KV-XA34M31 ONLY) | |
| D518 | 8-719-074-35 | RU4AM-T4 | |
| D519 | 8-719-312-71 | RS3FS (EXCEPT KV-XA34M31) | |
| D519 | 8-719-945-80 | ERC06-15S (KV-XA34M31 ONLY) | |
| D520 | 8-719-988-61 | 1SS355TE-17 (KV-XA34M31 ONLY) | |
| D521 | 8-719-302-43 | EL1Z (EXCEPT KV-XA34M31) | |
| D521 | 8-719-028-45 | D2L20U (KV-XA34M31 ONLY) | |
| D522 | 8-719-028-45 | D2L20U | |
| D523 | 8-719-302-43 | EL1Z (EXCEPT KV-XA34M31) | |
| D523 | 8-719-028-45 | D2L20U (KV-XA34M31 ONLY) | |
| D527 | 8-719-908-03 | GP08D | |
| D528 | 8-719-908-03 | GP08D | |
| D531 | 8-719-988-61 | 1SS355TE-17 | |
| D532 | 8-719-988-61 | 1SS355TE-17 | |
| D534 | 8-719-988-61 | 1SS355TE-17 (EXCEPT KV-XA34M31) | |
| D534 | 1-216-295-11 | SHORT 0 (KV-XA34M31 ONLY) | |
| D600 | 8-719-911-19 | 1SS119-25 | |
| D602 | 8-719-911-19 | 1SS119-25 | |
| D603 | 8-719-150-92 | RD33EB3T | |
| D604 | 8-719-028-72 | RGP02-17EL-6433 | |
| D605 | 8-719-510-22 | D3SB60 | |
| D606 | 8-719-108-18 | 5P-6M | |
| D607 | 8-719-073-01 | MA111-(K8).S0 | |
| D608 | 8-719-110-53 | RD20ES-B2 | |
| D609 | 8-719-311-31 | RU-1P | |
| D610 | 8-719-043-76 | AK04V0 | |
| D611 | 8-719-046-74 | AU-01Z-V1 | |
| D612 | 8-719-071-38 | D5S6M | |
| D613 | 8-719-046-74 | AU-01Z-V1 | |
| D614 | 8-719-046-74 | AU-01Z-V1 | |
| D617 | 8-719-067-18 | RN4Z | |
| D620 | 8-719-110-72 | RD30ESB2 | |
| D622 | 8-719-077-49 | D3L60 | |
| D623 | 8-719-978-65 | DTZ-TT11-15B | |
| D624 | 8-719-073-01 | MA111-(K8).S0 | |
| D625 | 8-719-977-28 | DTZ10B | |
| D628 | 8-719-911-19 | 1SS119-25 | |
| D630 | 8-719-052-74 | FMX-12S | |
| D631 | 8-719-068-00 | ERC04-06SE | |
| D632 | 8-719-068-00 | ERC04-06SE | |
| D633 | 8-719-948-45 | ERA22-08 | |
| D634 | 8-719-073-01 | MA111-(K8).S0 | |
| D635 | 8-719-073-01 | MA111-(K8).S0 | |
| D636 | 8-719-510-02 | D1NS4 | |
| D637 | 8-719-109-96 | RD6.8ES-B1 | |
| D638 | 8-719-510-48 | D1N20R | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | | <CONNECTOR> | |
| DY1 | * 1-580-798-11 | CONNECTOR PIN (DY) 6P | |
| | | <FERRITE BEAD> | |
| FB300 | 1-412-911-31 | FERRITE 0UH | |
| FB501 | 1-410-397-21 | FERRITE 1.1UH | |
| FB502 | 1-410-397-21 | FERRITE 1.1UH | |
| FB600 | 1-410-397-21 | FERRITE 1.1UH | |
| FB601 | 1-410-397-21 | FERRITE 1.1UH | |
| FB602 | 1-410-397-21 | FERRITE 1.1UH | |
| FB603 | 1-410-397-21 | FERRITE 1.1UH | |
| FB604 | 1-412-911-31 | FERRITE 0UH | |
| FB605 | 1-412-911-31 | FERRITE 0UH | |
| FB606 | 1-412-911-31 | FERRITE 0UH | |
| FB608 | 1-412-911-31 | FERRITE 0UH | |
| FB611 | 1-410-397-21 | FERRITE 1.1UH | |
| FB612 | 1-410-397-21 | FERRITE 1.1UH | |
| FB613 | 1-410-397-21 | FERRITE 1.1UH | |
| FB615 | 1-410-397-21 | FERRITE 1.1UH | |
| | | <IC> | |
| IC001 | 8-752-917-80 | CXP750097-032S | |
| IC002 | 8-759-371-21 | MM1319AFBE | |
| IC003 | 8-759-672-78 | M24C08-BN6(A) | |
| IC100 | 8-759-042-02 | S-80743AL-A7-S (EXCEPT KV-XA29M50) | |
| IC301 | 8-752-095-72 | CXA2159S | |
| IC302 | 8-759-666-90 | TDA9181T | |
| IC502 | 8-759-700-07 | NJM2903M | |
| IC503 | 8-759-980-58 | TDA8172 | |
| IC601 | 8-749-014-48 | STR-F6656 | |
| IC602 | 8-749-920-61 | SE-135N | |
| IC603 | 8-759-701-59 | NJM78M09FA | |
| IC604 | 8-759-231-53 | TA7805S | |
| | | <CHIP CONDUCTOR> | |
| JR001 | 1-216-295-11 | SHORT 0 | |
| JR002 | 1-216-295-11 | SHORT 0 | |
| JR003 | 1-216-295-11 | SHORT 0 | |
| JR004 | 1-216-295-11 | SHORT 0 | |
| JR006 | 1-216-295-11 | SHORT 0 | |
| JR007 | 1-216-295-11 | SHORT 0 | |
| JR008 | 1-216-295-11 | SHORT 0 | |
| JR010 | 1-216-295-11 | SHORT 0 | |
| JR012 | 1-216-295-11 | SHORT 0 | |
| JR014 | 1-216-295-11 | SHORT 0 | |
| JR015 | 1-216-295-11 | SHORT 0 | |
| JR016 | 1-216-295-11 | SHORT 0 | |
| JR020 | 1-216-295-11 | SHORT 0 | |
| JR022 | 1-216-295-11 | SHORT 0 | |
| JR023 | 1-216-295-11 | SHORT 0 | |
| JR024 | 1-216-295-11 | SHORT 0 | |
| JR025 | 1-216-295-11 | SHORT 0 | |
| JR028 | 1-216-295-11 | SHORT 0 | |
| JR030 | 1-216-295-11 | SHORT 0 | |
| JR031 | 1-216-295-11 | SHORT 0 | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| JR102 | 1-216-295-11 | SHORT | 0 |
| JR107 | 1-216-295-11 | SHORT | 0 (EXCEPT KV-XA29M50) |
| JR109 | 1-216-295-11 | SHORT | 0 (KV-XA29M50 ONLY) |
| JR214 | 1-216-295-11 | SHORT | 0 |
| JR304 | 1-216-295-11 | SHORT | 0 |
| JR308 | 1-216-295-11 | SHORT | 0 |
| JR309 | 1-216-295-11 | SHORT | 0 |
| JR310 | 1-216-295-11 | SHORT | 0 |
| JR311 | 1-216-295-11 | SHORT | 0 |
| JR400 | 1-216-295-11 | SHORT | 0 (KV-XA34M31 ONLY) |
| JR500 | 1-216-295-11 | SHORT | 0 |
| JR501 | 1-216-295-11 | SHORT | 0 |
| JR502 | 1-216-295-11 | SHORT | 0 |
| JR503 | 1-216-295-11 | SHORT | 0 |
| JR600 | 1-216-295-11 | SHORT | 0 |
| | | <COIL> | |
| L002 | 1-414-856-11 | INDUCTOR | 10UH |
| L003 | 1-414-180-11 | INDUCTOR | 3.3UH |
| L005 | 1-414-233-22 | INDUCTOR | 0UH |
| L101 | 1-414-856-11 | INDUCTOR | 10UH |
| L102 | 1-414-856-11 | INDUCTOR | 10UH |
| L103 | 1-414-856-11 | INDUCTOR | 10UH |
| L104 | 1-414-856-11 | INDUCTOR | 10UH |
| L105 | 1-414-856-11 | INDUCTOR | 10UH |
| L301 | 1-414-189-31 | INDUCTOR | 100UH |
| L302 | 1-414-185-41 | INDUCTOR | 22UH |
| L303 | 1-414-189-31 | INDUCTOR | 100UH |
| L304 | 1-414-189-31 | INDUCTOR | 100UH |
| L501 | 1-412-525-31 | INDUCTOR | 10UH |
| L502 | 1-422-613-11 | COIL, AIR CORE | |
| L503 | 1-412-525-31 | INDUCTOR | 10UH |
| L504 | 1-412-525-31 | INDUCTOR | 10UH |
| L507 | 1-459-111-00 | INDUCTOR | 10MH |
| L511 | 1-406-977-71 | INDUCTOR | 0UH |
| L512 | 1-412-549-31 | INDUCTOR | 1MH (KV-XA34M31 ONLY) |
| L513 | 1-412-551-31 | INDUCTOR | 1.5MH (EXCEPT KV-XA34M31) |
| L513 | 1-412-549-31 | INDUCTOR | 1MH (KV-XA34M31 ONLY) |
| L515 | 1-459-104-00 | COIL, WITH CORE | |
| L518 | 1-414-187-11 | INDUCTOR | 47UH |
| L601 | 1-412-527-11 | INDUCTOR | 15UH |
| L905 | 1-414-856-11 | INDUCTOR | 10UH |
| | | <PHOTO COUPLER> | |
| PH600 ⚠ | 8-749-924-35 | ON3171-R | |
| | | <TRANSISTOR> | |
| Q001 | 8-729-216-22 | 2SA1162-G | |
| Q002 | 8-729-230-49 | 2SC2712-YG | |
| Q101 | 8-729-230-49 | 2SC2712-YG | |
| Q301 | 8-729-216-22 | 2SA1162-G | |
| Q302 | 8-729-230-49 | 2SC2712-YG | |
| Q303 | 8-729-216-22 | 2SA1162-G | |
| Q304 | 8-729-216-22 | 2SA1162-G | |
| Q305 | 8-729-216-22 | 2SA1162-G | |
| Q306 | 8-729-230-49 | 2SC2712-YG | |
| Q307 | 8-729-230-49 | 2SC2712-YG | |
| Q308 | 8-729-216-22 | 2SA1162-G | |
| Q309 | 8-729-421-19 | UN2213 | |
| Q310 | 8-729-230-49 | 2SC2712-YG | |
| Q311 | 8-729-230-49 | 2SC2712-YG | |
| Q312 | 8-729-216-22 | 2SA1162-G | |
| Q313 | 8-729-230-49 | 2SC2712-YG | |
| Q314 | 8-729-216-22 | 2SA1162-G | |
| Q315 | 8-729-421-19 | UN2213 | |
| Q316 | 8-729-216-22 | 2SA1162-G | |
| Q317 | 8-729-216-22 | 2SA1162-G | |
| Q501 | 8-729-216-22 | 2SA1162-G | |
| Q502 | 8-729-216-22 | 2SA1162-G | |
| Q503 | 8-729-230-49 | 2SC2712-YG | |
| Q505 | 8-729-931-45 | IRF614 | |
| Q506 | 8-729-119-80 | 2SC2688-LK | |
| Q507 | 8-729-216-22 | 2SA1162-G | |
| Q509 | 8-729-230-49 | 2SC2712-YG | |
| Q511 | 8-729-016-32 | 2SC4927-01 | |
| Q600 | 8-729-119-78 | 2SC2785-HFE | |
| Q601 | 8-729-023-22 | 2SD2114K | |
| Q602 | 8-729-230-49 | 2SC2712-YG | |
| Q603 | 8-729-424-08 | UN2111 (EXCEPT KV-XA34M31) | |
| Q603 | 8-729-027-23 | DTA114EKA-T146 (KV-XA34M31 ONLY) | |
| Q604 | 8-729-200-17 | 2SA1091-O | |
| Q605 | 8-729-044-30 | 2SK2845-LB102 | |
| Q606 | 8-729-230-49 | 2SC2712-YG | |
| Q607 | 8-729-922-37 | 2SD2144S-UVW | |
| Q608 | 8-729-230-49 | 2SC2712-YG | |
| | | <RESISTOR> | |
| R001 | 1-414-233-22 | INDUCTOR 0UH | |
| R002 | 1-216-025-11 | RES-CHIP 100 5% 1/10W | |
| R003 | 1-216-073-00 | RES-CHIP 10K 5% 1/10W | |
| R004 | 1-216-025-11 | RES-CHIP 100 5% 1/10W | |
| R005 | 1-216-025-11 | RES-CHIP 100 5% 1/10W | |
| R008 | 1-216-065-91 | RES-CHIP 4.7K 5% 1/10W | |
| R010 | 1-216-065-91 | RES-CHIP 4.7K 5% 1/10W | |
| R011 | 1-216-065-91 | RES-CHIP 4.7K 5% 1/10W | |
| R012 | 1-216-065-91 | RES-CHIP 4.7K 5% 1/10W | |
| R013 | 1-216-065-91 | RES-CHIP 4.7K 5% 1/10W | |
| R014 | 1-216-025-11 | RES-CHIP 100 5% 1/10W | |
| R015 | 1-216-025-11 | RES-CHIP 100 5% 1/10W | |
| R018 | 1-216-033-00 | RES-CHIP 220 5% 1/10W | |
| R019 | 1-216-073-00 | RES-CHIP 10K 5% 1/10W | |
| R020 | 1-216-045-00 | RES-CHIP 680 5% 1/10W | |
| R021 | 1-216-073-00 | RES-CHIP 10K 5% 1/10W | |
| R022 | 1-216-295-11 | SHORT 0 | |
| R023 | 1-216-049-11 | RES-CHIP 1K 5% 1/10W | |
| R024 | 1-216-063-91 | RES-CHIP 3.9K 5% 1/10W | |
| R025 | 1-216-063-91 | RES-CHIP 3.9K 5% 1/10W | |
| R026 | 1-216-063-91 | RES-CHIP 3.9K 5% 1/10W | |
| R027 | 1-216-049-11 | RES-CHIP 1K 5% 1/10W | |
| R028 | 1-216-073-00 | RES-CHIP 10K 5% 1/10W (KV-XA29M50 ONLY) | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R029 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R031 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R032 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R034 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R035 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R036 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R037 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R038 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R040 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R041 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R042 | 1-216-295-11 | SHORT | 0 | | |
| R043 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R044 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R045 | 1-414-233-22 | INDUCTOR | 0UH | | |
| R046 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R047 | 1-414-233-22 | INDUCTOR | 0UH | | |
| R048 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R050 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R053 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R058 | 1-216-295-11 | SHORT | 0 | | |
| R059 | 1-216-295-11 | SHORT | 0 | | |
| R060 | 1-216-295-11 | SHORT | 0 | | |
| R061 | 1-216-295-11 | SHORT | 0 | | |
| R062 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R063 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R064 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R065 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R066 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R067 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R068 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R101 | 1-216-025-11 | RES-CHIP (KV-XA29M50 ONLY) | 100 | 5% | 1/10W |
| R102 | 1-216-025-11 | RES-CHIP (KV-XA29M50 ONLY) | 100 | 5% | 1/10W |
| R105 | 1-216-295-11 | SHORT | 0 | | |
| R109 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R111 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R112 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R113 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R225 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R226 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R227 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R237 | 1-216-295-11 | SHORT | 0 | | |
| R301 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| R302 | 1-216-295-11 | SHORT | 0 | | |
| R303 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R304 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R308 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R309 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R310 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R311 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R312 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R313 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R314 | 1-216-083-00 | RES-CHIP | 27K | 5% | 1/10W |
| R315 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R316 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R317 | 1-216-091-00 | RES-CHIP | 56K | 5% | 1/10W |
| R318 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R319 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R320 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R321 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R322 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R323 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R324 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R326 | 1-216-029-00 | RES-CHIP | 150 | 5% | 1/10W |
| R327 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R328 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R329 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R331 | 1-216-295-11 | SHORT | 0 | | |
| R332 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R335 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R336 | 1-216-049-11 | RES-CHIP (KV-XA34M31 ONLY) | 1.0K | 5% | 1/10W |
| R338 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R339 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R340 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R345 | 1-216-081-00 | RES-CHIP (EXCEPT KV-XA34M31) | 22K | 5% | 1/10W |
| R345 | 1-216-073-00 | RES-CHIP (KV-XA34M31 ONLY) | 10K | 5% | 1/10W |
| R348 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R349 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R350 | 1-216-061-00 | RES-CHIP (EXCEPT KV-XA34M31) | 3.3K | 5% | 1/10W |
| R350 | 1-216-057-00 | RES-CHIP (KV-XA34M31 ONLY) | 2.2K | 5% | 1/10W |
| R351 | 1-216-053-00 | RES-CHIP (EXCEPT KV-XA34M31) | 1.5K | 5% | 1/10W |
| R351 | 1-216-049-11 | RES-CHIP (KV-XA34M31 ONLY) | 1K | 5% | 1/10W |
| R354 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R355 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R356 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R357 | 1-216-079-00 | RES-CHIP | 18K | 5% | 1/10W |
| R358 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R359 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R360 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R361 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R362 | 1-216-075-00 | RES-CHIP | 12K | 5% | 1/10W |
| R363 | 1-216-079-00 | RES-CHIP | 18K | 5% | 1/10W |
| R364 | 1-216-295-11 | SHORT | 0 | | |
| R365 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R366 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R367 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R368 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R370 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R371 | 1-216-083-00 | RES-CHIP | 27K | 5% | 1/10W |
| R372 | 1-216-091-00 | RES-CHIP | 56K | 5% | 1/10W |
| R375 | 1-216-025-11 | RES-CHIP (EXCEPT KV-XA29M50) | 100 | 5% | 1/10W |
| R376 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R377 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R378 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R379 | 1-218-179-11 | RES-CHIP | 10M | 5% | 1/10W |
| R381 | 1-216-295-11 | SHORT | 0 | | |

**A**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R382 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R383 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R384 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R385 | 1-216-029-00 | RES-CHIP | 150 | 5% | 1/10W |
| R391 | 1-216-295-11 | SHORT | 0 | | |
| R500 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R501 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R505 | 1-208-830-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R505 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R506 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R506 | 1-216-079-00 | RES-CHIP | 18K | 5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R507 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R508 | 1-216-471-11 | METAL OXIDE | 27 | 5% | 3W |
| | | (EXCEPT KV-XA34M31) | | | |
| R508 | 1-215-909-11 | METAL OXIDE | 47 | 5% | 3W |
| | | (KV-XA34M31 ONLY) | | | |
| R509 | 1-216-473-11 | METAL OXIDE | 56 | 5% | 3W |
| | | (EXCEPT KV-XA34M31) | | | |
| R509 | 1-216-474-11 | METAL OXIDE | 82 | 5% | 3W |
| | | (KV-XA34M31 ONLY) | | | |
| R510 | 1-216-449-11 | METAL OXIDE | 56 | 5% | 2W |
| | | (EXCEPT KV-XA34M31) | | | |
| R510 | 1-216-424-11 | METAL OXIDE | 39 | 5% | 1W |
| | | (KV-XA34M31 ONLY) | | | |
| R511 | 1-215-908-00 | METAL OXIDE | 33 | 5% | 3W |
| | | (EXCEPT KV-XA34M31) | | | |
| R511 | 1-216-399-00 | METAL OXIDE | 6.8 | 5% | 3W |
| | | (KV-XA34M31 ONLY) | | | |
| R515 | 1-215-911-11 | METAL OXIDE | 100 | 5% | 3W |
| | | (EXCEPT KV-XA34M31) | | | |
| R515 | 1-216-349-00 | METAL OXIDE | 1 | 5% | 1W |
| | | (KV-XA34M31 ONLY) | | | |
| R517 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| R518 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R519 | 1-215-913-11 | METAL OXIDE | 220 | 5% | 3W |
| | | (EXCEPT KV-XA34M31) | | | |
| R519 | 1-216-469-11 | METAL OXIDE | 12 | 5% | 3W |
| | | (KV-XA34M31 ONLY) | | | |
| R520 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R522 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R523 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R525 | 1-208-846-11 | METAL CHIP | 470K | 0.5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R525 | 1-208-854-11 | METAL CHIP | 1M | 0.5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R526 | 1-208-804-11 | METAL CHIP | 8.2K | 0.5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R526 | 1-208-803-11 | METAL CHIP | 7.5K | 0.5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R527 | 1-216-001-00 | RES-CHIP | 10 | 5% | 1/10W |
| R528 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| R529 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R531 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R532 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R533 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R534 | 1-216-364-11 | METAL OXIDE | 0.39 | 5% | 2W |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R535 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W |
| R536 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W |
| R537 | 1-208-804-11 | METAL CHIP | 8.2K | 0.5% | 1/10W |
| R539 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R540 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R541 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R542 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R542 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R543 | 1-216-437-00 | METAL OXIDE | 5.6K | 5% | 1W |
| R544 | 1-215-917-11 | METAL OXIDE | 1K | 5% | 3W |
| | | (EXCEPT KV-XA34M31) | | | |
| R544 | 1-216-480-11 | METAL OXIDE | 820 | 5% | 3W |
| | | (KV-XA34M31 ONLY) | | | |
| R545 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W |
| R546 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W |
| R547 | 1-216-085-00 | RES-CHIP | 33K | 5% | 1/10W |
| R548 | 1-208-796-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R549 | 1-215-452-00 | METAL | 20K | 1% | 1/4W |
| | | (EXCEPT KV-XA34M31) | | | |
| R549 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| | | (KV-XA34M31 ONLY) | | | |
| R550 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R551 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| | | (EXCEPT KV-XA34M31) | | | |
| R551 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| | | (KV-XA34M31 ONLY) | | | |
| R552 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R553 | 1-215-453-00 | METAL | 22K | 1% | 1/4W |
| R554 | 1-215-453-00 | METAL | 22K | 1% | 1/4W |
| R556 | 1-215-437-00 | METAL | 4.7K | 1% | 1/4W |
| R557 | 1-216-361-00 | METAL OXIDE | 0.22 | 5% | 2W |
| | | (KV-XA34M31 ONLY) | | | |
| R558 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R559 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R560 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R561 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R562 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R564 | 1-208-820-11 | METAL CHIP | 39K | 0.5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R564 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R565 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R565 | 1-216-061-00 | RES-CHIP | 3.3K | 5% | 1/10W |
| | | (KV-XA34M31 ONLY) | | | |
| R567 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R568 | 1-249-383-11 | CARBON | 1.5 | 5% | 1/4W |
| R570 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R571 | 1-215-443-00 | METAL | 8.2K | 1% | 1/4W |
| | | (EXCEPT KV-XA34M31) | | | |
| R571 | 1-215-442-00 | METAL | 7.5K | 1% | 1/4W |
| | | (KV-XA34M31 ONLY) | | | |
| R573 | 1-216-083-00 | RES-CHIP | 27K | 5% | 1/10W |
| | | (EXCEPT KV-XA34M31) | | | |
| R575 | 1-208-796-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R577 | 1-215-913-11 | METAL OXIDE | 220 | 5% | 3W |
| R578 | 1-216-369-00 | METAL OXIDE | 1 | 5% | 2W |

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R579 | 1-216-295-11 | SHORT | 0 | | |
| R580 | 1-208-830-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R581 | 1-208-790-11 | METAL CHIP (EXCEPT KV-XA34M31) | 2.2K | 0.5% | 1/10W |
| R581 | 1-208-798-11 | METAL CHIP (KV-XA34M31 ONLY) | 4.7K | 0.5% | 1/10W |
| R582 | 1-216-295-11 | SHORT | 0 (KV-XA34M31 ONLY) | | |
| R583 | 1-216-125-00 | RES-CHIP (KV-XA34M31 ONLY) | 1.5M | 5% | 1/10W |
| R584 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R585 | 1-249-385-11 | CARBON (EXCEPT KV-XA34M31) | 2.2 | 5% | 1/4W |
| R585 | 1-249-381-11 | CARBON (KV-XA34M31 ONLY) | 1 | 5% | 1/4W |
| R587 | 1-208-822-11 | METAL CHIP (EXCEPT KV-XA34M31) | 47K | 0.5% | 1/10W |
| R587 | 1-208-849-11 | METAL CHIP (KV-XA34M31 ONLY) | 620K | 0.5% | 1/10W |
| R588 | 1-215-888-00 | METAL OXIDE (EXCEPT KV-XA34M31) | 220 | 5% | 2W |
| R588 | 1-215-911-11 | METAL OXIDE (KV-XA34M31 ONLY) | 100 | 5% | 3W |
| R589 | 1-215-888-00 | METAL OXIDE (EXCEPT KV-XA34M31) | 220 | 5% | 2W |
| R589 | 1-215-886-11 | METAL OXIDE (KV-XA34M31 ONLY) | 100 | 5% | 2W |
| R590 | 1-215-465-00 | METAL | 68K | 1% | 1/4W |
| R591 | 1-260-288-11 | CARBON | 0.47 | 5% | 1/2W |
| R592 | 1-208-820-11 | METAL CHIP (EXCEPT KV-XA34M31) | 39K | 0.5% | 1/10W |
| R592 | 1-208-830-11 | METAL CHIP (KV-XA34M31 ONLY) | 100K | 0.5% | 1/10W |
| R593 | 1-260-288-11 | CARBON | 0.47 | 5% | 1/2W |
| R594 | 1-260-288-11 | CARBON | 0.47 | 5% | 1/2W |
| R595 | 1-216-073-00 | RES-CHIP (EXCEPT KV-XA34M31) | 10K | 5% | 1/10W |
| R596 | 1-215-916-00 | METAL OXIDE (EXCEPT KV-XA34M31) | 680 | 5% | 3W |
| R596 | 1-216-480-11 | METAL OXIDE (KV-XA34M31 ONLY) | 820 | 5% | 3W |
| R597 | 1-247-750-11 | CARBON | 680 | 5% | 1/2W |
| R598 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R599 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R600 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R601 | 1-249-420-11 | CARBON (EXCEPT KV-XA34M31) | 1.8K | 5% | 1/4W |
| R601 | 1-249-417-11 | CARBON (KV-XA34M31 ONLY) | 1K | 5% | 1/4W |
| R602 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R603 | 1-215-485-00 | METAL | 470K | 1% | 1/4W |
| R604 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R607 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R608 | 1-240-205-91 | CARBON | 22M | 5% | 1/2W |
| R609 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R610 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R611 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R612 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R614 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R615 | 1-216-369-00 | METAL OXIDE (EXCEPT KV-XA34M31) | 1 | 5% | 2W |
| R615 | 1-216-366-00 | METAL OXIDE (KV-XA34M31 ONLY) | 0.56 | 5% | 2W |
| R616 | 1-260-302-51 | CARBON | 6.8 | 5% | 1/2W |
| R617 | 1-247-791-91 | CARBON | 22 | 5% | 1/4W |
| R619 | 1-260-128-91 | CARBON | 270K | 5% | 1/2W |
| R621 | 1-215-864-00 | METAL OXIDE | 150 | 5% | 1W |
| R623 | 1-216-095-00 | RES-CHIP | 82K | 5% | 1/10W |
| R624 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R626 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R627 | 1-240-251-11 | CMT-MELF | 6.8 | 5% | 10W |
| R629 | 1-247-747-11 | CARBON | 470 | 5% | 1/2W |
| R630 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R631 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R632 | 1-220-886-11 | FUSIBLE | 0.1 | 10% | 1W |
| R634 ⚠ | 1-218-265-11 | METAL | 8.2M | 5% | 1W |
| R635 | 1-216-492-11 | METAL OXIDE | 82K | 5% | 3W |
| R636 | 1-215-924-00 | METAL OXIDE | 15K | 5% | 3W |
| R637 | 1-216-492-11 | METAL OXIDE | 82K | 5% | 3W |
| R639 | 1-216-361-21 | METAL OXIDE | 0.22 | 5% | 2W |
| R640 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R641 | 1-216-361-21 | METAL OXIDE | 0.22 | 5% | 2W |
| R642 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R643 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R644 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R646 | 1-215-924-00 | METAL OXIDE | 15K | 5% | 3W |
| R647 | 1-249-387-11 | CARBON | 3.3 | 5% | 1/4W |
| R648 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R649 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R650 | 1-215-882-00 | METAL OXIDE | 22 | 5% | 2W |
| R652 | 1-215-925-11 | METAL OXIDE | 22K | 5% | 3W |
| R653 | 1-215-873-00 | METAL OXIDE | 4.7K | 5% | 1W |
| R654 | 1-216-369-00 | METAL OXIDE (KV-XA34M31 ONLY) | 1 | 5% | 2W |
| R656 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R657 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W |
| R659 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R660 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R661 | 1-215-873-00 | METAL OXIDE | 4.7K | 5% | 1W |
| R682 | 1-219-134-11 | FUSIBLE | 0.1 | 10% | 1/4W |
| R909 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R910 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |

<RELAY>

| | | | |
|---|---|---|---|
| RY600 | ⚠ | 1-755-214-11 | RELAY, AC POWER |
| RY601 | ⚠ | 1-755-214-11 | RELAY, AC POWER |

<SWITCH>

| | | | |
|---|---|---|---|
| S501 | | 1-572-707-11 | SWITCH, LEVER |
| S502 | | 1-572-707-11 | SWITCH, LEVER |

<TRANSFORMER>

| | | | |
|---|---|---|---|
| T501 | | 1-437-195-11 | TRANSFORMER, HORIZONTAL DRIVE |
| T503 | ⚠ | 1-453-284-11 | TRANSFORMER ASSY, FLYBACK (NX-4009//M3I4) (EXCEPT KV-XA34M31) |
| | ⚠ | 1-453-298-31 | TRANSFORMER ASSY, FLYBACK (NX-4009//M3P4) (KV-XA34M31) |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| T504 | 1-431-475-11 | TRANSFORMER, HORIZONTAL LINEAR | |
| T505 | 1-426-981-11 | TRANSFORMER, FERRITE (PMT) | |
| T601 | ⚠ 1-424-505-11 | TRANSFORMER, LINE FILTER | |
| | | (KV-XA29M50/XA29M61) | |
| | ⚠ 1-429-707-12 | TRANSFORMER, LINE FILTER | |
| | | (KV-XA29M31/XA34M31) | |
| T603 | ⚠ 1-431-976-11 | TRANSFORMER, CONVERTER (SRT) | |
| T604 | ⚠ 1-431-852-11 | TRANSFORMER, CONVERTER (SRT) | |
| | | <THERMISTOR> | |
| TH600 | 1-803-586-11 | THERMISTOR, NTC | |
| | | <THERMISTOR> | |
| THP600 | 1-803-540-11 | THERMISTOR | |
| | | <TUNER> | |
| TU101 | 8-598-449-10 | TUNER, FSS BTF-LG433 (KV-XA29M50 ONLY) | |
| TU101 | 8-598-451-00 | TUNER, FSS BTF-WG441 (EXCEPT KV-XA29M50) | |
| | | <CRYSTAL> | |
| X001 | 1-781-174-21 | VIBRATOR, CERAMIC | |
| X301 | 1-781-134-21 | VIBRATOR, CRYSTAL | |
| X302 | 1-781-132-21 | VIBRATOR, CRYSTAL | |

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| | | |
|---|---|---|
| * | A-1136-144-A | B BOARD COMPLETE (EXCEPT KV-XA34M31) |
| * | A-1136-170-A | B BOARD COMPLETE (KV-XA34M31 ONLY) |
| | | ********** |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) |
| | | <CAPACITOR> |

| | | | | | |
|---|---|---|---|---|---|
| C1305 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1307 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1310 | 1-104-664-11 | ELECT | 47UF | 20.00% | 16V |
| C1312 | 1-104-664-11 | ELECT | 47UF | 20.00% | 16V |
| C1330 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1333 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1395 | 1-163-249-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C1401 | 1-104-661-91 | ELECT | 330UF | 20.00% | 16V |
| C1402 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C1403 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C1404 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C1405 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C1406 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C1408 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1410 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C1411 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C1413 | 1-126-935-11 | ELECT | 470UF | 20.00% | 16V |
| C1414 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1415 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C1416 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1418 | 1-163-031-11 | CERAMIC CHIP | 0.01UF | | 50V |
| C1419 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C1421 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1422 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1423 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1425 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1426 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1428 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C1429 | 1-104-663-11 | ELECT | 33UF | 20.00% | 25V |
| C1431 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1432 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C1433 | 1-104-664-11 | ELECT | 47UF | 20.00% | 16V |
| C1434 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1435 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1436 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1439 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1440 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1441 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1442 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1443 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1444 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | | 25V |
| C1445 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1446 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1447 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1448 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | | 25V |
| C1449 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C1457 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1459 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1460 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C1461 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1462 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C1464 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C3201 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3202 | 1-136-171-00 | FILM | 0.33UF | 5.00% | 50V |
| C3203 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C3208 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C3209 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| C3210 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C3211 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| C3213 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C3214 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C3215 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3216 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3217 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C3218 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C3219 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C3220 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C3221 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C3222 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C3223 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C3224 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C3225 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3226 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3227 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C3228 | 1-107-698-11 | ELECT | 10UF | 20.00% | 25V |

| REF. NO. | PART NO. | DESCRIPTION | | REMARK |
|---|---|---|---|---|
| C3229 | 1-107-698-11 | ELECT | 10UF | 20.00% 25V |
| C3230 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% 50V |
| C3231 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V |
| C3232 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V |
| C3233 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% 50V |
| C3234 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | 10V |
| C3235 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | 10V |
| C3236 | 1-115-185-11 | CERAMIC CHIP | 0.033UF | 10.00% 50V |
| C3237 | 1-164-182-11 | CERAMIC CHIP | 0.0033UF | 10.00% 50V |
| C3238 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | 25V |
| C3239 | 1-136-171-00 | FILM | 0.33UF | 5.00% 50V |
| C3240 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3241 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3242 | 1-126-965-11 | ELECT | 22UF | 20.00% 50V |
| C3243 | 1-163-989-11 | CERAMIC CHIP | 0.033UF | 10.00% 25V |
| C3244 | 1-164-346-11 | CERAMIC CHIP | 1UF | 16V |
| C3245 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | 25V |
| C3246 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5.00% 50V |
| C3247 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3248 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| C3249 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | 16V |
| C3250 | 1-164-346-11 | CERAMIC CHIP | 1UF | 16V |
| C3251 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V |
| C3252 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| C3253 | 1-126-933-11 | ELECT | 100UF | 20.00% 16V |
| C3254 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | 16V |
| C3255 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5.00% 50V |
| C3256 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3257 | 1-164-346-11 | CERAMIC CHIP | 1UF | 16V |
| C3258 | 1-163-989-11 | CERAMIC CHIP | 0.033UF | 10.00% 25V |
| C3259 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3260 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| C3262 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V |
| C3264 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| C3265 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | 10V |
| C3266 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| C3267 | 1-164-182-11 | CERAMIC CHIP | 0.0033UF | 10.00% 50V |
| C3268 | 1-163-009-11 | CERAMIC CHIP | 0.001UF | 10.00% 50V |
| C3269 | 1-163-009-11 | CERAMIC CHIP | 0.001UF | 10.00% 50V |
| C3270 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3271 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V |
| C3272 | 1-104-665-11 | ELECT | 100UF | 20.00% 25V |
| C3273 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| C3274 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | 10V |
| C3275 | 1-115-185-11 | CERAMIC CHIP | 0.033UF | 10.00% 50V |
| C3276 | 1-115-185-11 | CERAMIC CHIP | 0.033UF | 10.00% 50V |
| C3277 | 1-115-185-11 | CERAMIC CHIP | 0.033UF | 10.00% 50V |
| C3280 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| C3281 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% 50V |
| C6200 | 1-216-295-11 | SHORT | 0 | |
| C6202 | 1-128-550-11 | ELECT | 2200UF | 20.00% 50V |
| C6203 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% 50V |
| C6204 | 1-128-550-11 | ELECT | 2200UF | 20.00% 50V |
| C6205 | 1-130-495-00 | MYLAR | 0.1UF | 5.00% 50V |
| C6206 | 1-128-550-11 | ELECT | 2200UF | 20.00% 50V |
| C6209 | 1-130-495-00 | MYLAR | 0.1UF | 5.00% 50V |
| C6210 | 1-126-924-11 | ELECT | 330UF | 20.00% 10V |
| C6211 | 1-126-924-11 | ELECT | 330UF | 20.00% 10V |
| C6212 | 1-104-664-11 | ELECT | 47UF | 20.00% 25V |
| C6213 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V |
| C6217 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% 25V |
| C6220 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | 16V |
| C6222 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | 16V |
| C6223 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V |
| C6241 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V |
| C6244 | 1-163-017-00 | CERAMIC CHIP (EXCEPT KV-XA34M31) | 0.0047UF | 10.00% 50V |
| C6244 | 1-163-019-00 | CERAMIC CHIP (KV-XA34M31 ONLY) | 0.0068UF | 10.00% 50V |
| C6245 | 1-163-017-00 | CERAMIC CHIP (EXCEPT KV-XA34M31) | 0.0047UF | 10.00% 50V |
| C6245 | 1-163-019-00 | CERAMIC CHIP (KV-XA34M31 ONLY) | 0.0068UF | 10.00% 50V |
| C6249 | 1-216-295-11 | SHORT | 0 | |
| | | <CONNECTOR> | | |
| CN1300* | 1-564-506-11 | PLUG, CONNECTOR 3P | | |
| CN1400* | 1-564-512-11 | PLUG, CONNECTOR 9P | | |
| CN1401* | 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | |
| CN1403* | 1-564-506-11 | PLUG, CONNECTOR 3P | | |
| CN1405* | 1-779-892-11 | CONNECTOR, BOARD TO BOARD 10P | | |
| CN1406* | 1-779-892-11 | CONNECTOR, BOARD TO BOARD 10P | | |
| CN1407* | 1-779-891-11 | CONNECTOR, BOARD TO BOARD 8P | | |
| CN1409 | 1-764-818-11 | CONNECTOR, BOARD TO BOARD 10P | | |
| CN6200* | 1-564-507-11 | PLUG, CONNECTOR 4P | | |
| CN6204* | 1-564-509-11 | PLUG, CONNECTOR 6P | | |
| CN6206* | 1-564-508-11 | PLUG, CONNECTOR 5P | | |
| | | <DIODE> | | |
| D1401 | 8-719-158-35 | RD9.1S-B | | |
| D1402 | 8-719-158-35 | RD9.1S-B | | |
| D1403 | 8-719-158-35 | RD9.1S-B | | |
| D1404 | 8-719-158-35 | RD9.1S-B | | |
| D1405 | 8-719-158-35 | RD9.1S-B | | |
| D1406 | 8-719-158-35 | RD9.1S-B | | |
| D1407 | 8-719-158-35 | RD9.1S-B | | |
| D1408 | 8-719-158-35 | RD9.1S-B | | |
| D1409 | 8-719-158-35 | RD9.1S-B | | |
| D1410 | 8-719-158-35 | RD9.1S-B | | |
| D1411 | 8-719-158-35 | RD9.1S-B | | |
| D1412 | 8-719-158-35 | RD9.1S-B | | |
| D1415 | 8-719-158-35 | RD9.1S-B | | |
| D1416 | 8-719-158-35 | RD9.1S-B | | |
| D1418 | 8-719-158-35 | RD9.1S-B | | |
| D3201 | 8-719-988-61 | 1SS355TE-17 | | |
| D3203 | 8-719-988-61 | 1SS355TE-17 | | |
| D6210 | 8-719-820-41 | 1SS302 | | |
| D6211 | 8-719-988-61 | 1SS355TE-17 | | |
| D6212 | 8-719-988-61 | 1SS355TE-17 | | |
| | | <IC> | | |
| IC1401 | 8-752-068-46 | CXA1855S | | |
| IC1402 | 8-759-100-96 | UPC4558G2 | | |

**B**

| REF. NO. | PART NO. | DESCRIPTION | | REMARK |
|---|---|---|---|---|
| IC1404 | 8-759-701-59 | NJM78M09FA | | |
| IC3200 | 8-759-100-96 | UPC4558G2 | | |
| IC3200 | 8-759-100-96 | UPC4558G2 | | |
| IC3200 | 8-759-100-96 | UPC4558G2 | | |
| IC3200 | 8-759-100-96 | UPC4558G2 | | |
| IC3201 | 8-759-689-71 | NJM2188M-TE2 | | |
| IC3202 | 8-759-100-96 | UPC4558G2 | | |
| IC3202 | 8-759-100-96 | UPC4558G2 | | |
| IC3202 | 8-759-100-96 | UPC4558G2 | | |
| IC3202 | 8-759-100-96 | UPC4558G2 | | |
| IC3203 | 8-759-711-10 | NJU4066BM | | |
| IC3204 | 8-759-100-96 | UPC4558G2 | | |
| IC3205 | 8-752-058-68 | CXA1315M | | |
| IC3206 | 8-759-678-92 | BH3868AFS-E2 | | |
| IC6200 | 8-759-168-24 | TA8200AH | | |
| | | <JACK> | | |
| J1401 | 1-784-646-11 | TERMINAL, S | | |
| J1402 | 1-778-387-11 | JACK BLOCK, PIN 12P | | |
| | | <CHIP CONDUCTOR> | | |
| JR1303 | 1-216-295-11 | SHORT | 0 | |
| JR1405 | 1-216-295-11 | SHORT | 0 | |
| JR1406 | 1-216-295-11 | SHORT | 0 | |
| JR1407 | 1-216-295-11 | SHORT | 0 | |
| JR1409 | 1-216-295-11 | SHORT | 0 | |
| JR1410 | 1-216-295-11 | SHORT | 0 | |
| JR1411 | 1-216-295-11 | SHORT | 0 | |
| JR3202 | 1-216-295-11 | SHORT | 0 | |
| JR3204 | 1-216-295-11 | SHORT | 0 | |
| JR3209 | 1-216-295-11 | SHORT | 0 | |
| JR3210 | 1-216-295-11 | SHORT | 0 | |
| JR3211 | 1-216-295-11 | SHORT | 0 | |
| JR3212 | 1-216-295-11 | SHORT | 0 | |
| JR6200 | 1-216-295-11 | SHORT | 0 | |
| JR6202 | 1-216-295-11 | SHORT | 0 | |
| JR6203 | 1-216-295-11 | SHORT | 0 | |
| JR6204 | 1-216-295-11 | SHORT | 0 | |
| JR6206 | 1-216-295-11 | SHORT | 0 | |
| | | <COIL> | | |
| L1313 | 1-414-187-11 | INDUCTOR | 47UH | |
| L1314 | 1-414-856-11 | INDUCTOR | 10UH | |
| L1315 | 1-414-856-11 | INDUCTOR | 10UH | |
| L1317 | 1-414-856-11 | INDUCTOR | 10UH | |
| L1404 | 1-412-537-31 | INDUCTOR | 100UH | |
| L3202 | 1-414-856-11 | INDUCTOR | 10UH | |
| | | <TRANSISTOR> | | |
| Q1316 | 8-729-216-22 | 2SA1162-G | | |
| Q1317 | 8-729-230-49 | 2SC2712-YG | | |
| Q1318 | 8-729-230-49 | 2SC2712-YG | | |
| Q1323 | 8-729-230-49 | 2SC2712-YG | | |
| Q1324 | 8-729-230-49 | 2SC2712-YG | | |
| Q1365 | 8-729-230-49 | 2SC2712-YG | | |
| Q1372 | 8-729-230-49 | 2SC2712-YG | | |
| Q1402 | 8-729-216-22 | 2SA1162-G | | |
| Q1403 | 8-729-230-49 | 2SC2712-YG | | |
| Q1404 | 8-729-230-49 | 2SC2712-YG | | |
| Q1408 | 8-729-230-49 | 2SC2712-YG | | |
| Q1409 | 8-729-230-49 | 2SC2712-YG | | |
| Q3201 | 8-729-224-62 | 2SK246-GR | | |
| Q3202 | 8-729-230-49 | 2SC2712-YG | | |
| Q3203 | 8-729-230-49 | 2SC2712-YG | | |
| Q3204 | 8-729-224-62 | 2SK246-GR | | |
| Q6201 | 8-729-421-19 | UN2213 | | |
| Q6203 | 8-729-421-19 | UN2213 | | |
| Q6204 | 8-729-421-19 | UN2213 | | |
| Q6208 | 8-729-421-19 | UN2213 | | |
| | | <RESISTOR> | | |
| R1301 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1318 | 1-216-033-00 | RES-CHIP | 220 | 5% 1/10W |
| R1320 | 1-216-081-00 | RES-CHIP | 22K | 5% 1/10W |
| R1343 | 1-216-049-11 | RES-CHIP (EXCEPT KV-XA34M31) | 1K | 5% 1/10W |
| R1344 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1345 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1346 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1347 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1350 | 1-216-085-00 | RES-CHIP | 33K | 5% 1/10W |
| R1359 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1360 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1361 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1362 | 1-216-055-00 | RES-CHIP | 1.8K | 5% 1/10W |
| R1363 | 1-216-033-00 | RES-CHIP | 220 | 5% 1/10W |
| R1364 | 1-216-089-11 | RES-CHIP | 47K | 5% 1/10W |
| R1365 | 1-216-081-00 | RES-CHIP | 22K | 5% 1/10W |
| R1366 | 1-216-295-11 | SHORT | 0 | |
| R1368 | 1-216-049-11 | RES-CHIP | 1K | 5% 1/10W |
| R1369 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1370 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1371 | 1-216-039-00 | RES-CHIP | 390 | 5% 1/10W |
| R1372 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W |
| R1397 | 1-216-045-00 | RES-CHIP | 680 | 5% 1/10W |
| R1400 | 1-216-105-91 | RES-CHIP | 220K | 5% 1/10W |
| R1403 | 1-216-033-00 | RES-CHIP | 220 | 5% 1/10W |
| R1404 | 1-216-295-11 | SHORT | 0 | |
| R1406 | 1-216-013-00 | RES-CHIP | 33 | 5% 1/10W |
| R1407 | 1-216-033-00 | RES-CHIP | 220 | 5% 1/10W |
| R1408 | 1-216-031-00 | RES-CHIP | 180 | 5% 1/10W |
| R1409 | 1-216-105-91 | RES-CHIP | 220K | 5% 1/10W |
| R1410 | 1-216-105-91 | RES-CHIP | 220K | 5% 1/10W |
| R1411 | 1-216-089-11 | RES-CHIP | 47K | 5% 1/10W |
| R1412 | 1-216-089-11 | RES-CHIP | 47K | 5% 1/10W |
| R1413 | 1-216-105-91 | RES-CHIP | 220K | 5% 1/10W |
| R1414 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1417 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1418 | 1-216-025-11 | RES-CHIP | 100 | 5% 1/10W |
| R1421 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R1424 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1425 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W |
| R1426 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1427 | 1-216-063-91 | RES-CHIP | 3.9K | 5% | 1/10W |
| R1428 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1429 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R1430 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1431 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1432 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1433 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1435 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W |
| R1436 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1437 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W |
| R1438 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1439 | 1-216-295-11 | SHORT | 0 | | |
| R1441 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1442 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1443 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1444 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R1445 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1446 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| R1447 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1448 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W |
| R1449 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1450 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1451 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1452 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R1453 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1454 | 1-216-091-00 | RES-CHIP | 56K | 5% | 1/10W |
| R1455 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1456 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| R1457 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1458 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1459 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1460 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1461 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1463 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1464 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| R1465 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| R1466 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1467 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R1468 | 1-216-093-91 | RES-CHIP | 68K | 5% | 1/10W |
| R1469 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| R1470 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| R1471 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W |
| R1472 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1473 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1475 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R1476 | 1-216-091-00 | RES-CHIP | 56K | 5% | 1/10W |
| R1477 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W |
| R1478 | 1-216-051-00 | RES-CHIP | 1.2K | 5% | 1/10W |
| R1479 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| R1480 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| R1481 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W |
| R1482 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1483 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1484 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1485 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1486 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W |
| R1487 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R1488 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R1489 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W |
| R1490 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1491 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1492 | 1-216-021-00 | RES-CHIP | 68 | 5% | 1/10W |
| R1493 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W |
| R1496 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1497 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1498 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1499 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1500 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1501 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R1503 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1504 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1505 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W |
| R1506 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R3200 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3201 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3202 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R3203 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3204 | 1-216-061-00 | RES-CHIP | 3.3K | 5% | 1/10W |
| R3205 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R3206 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R3207 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3208 | 1-216-055-00 | RES-CHIP | 1.8K | 5% | 1/10W |
| R3209 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R3210 | 1-216-055-00 | RES-CHIP | 1.8K | 5% | 1/10W |
| R3211 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R3212 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R3213 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R3214 | 1-216-055-00 | RES-CHIP | 1.8K | 5% | 1/10W |
| R3215 | 1-216-095-00 | RES-CHIP | 82K | 5% | 1/10W |
| R3216 | 1-216-129-00 | RES-CHIP | 2.2M | 5% | 1/10W |
| R3217 | 1-216-085-00 | RES-CHIP | 33K | 5% | 1/10W |
| R3218 | 1-216-091-00 | RES-CHIP | 56K | 5% | 1/10W |
| R3219 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3220 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R3221 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3222 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3223 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R3224 | 1-216-101-00 | RES-CHIP | 150K | 5% | 1/10W |
| R3225 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R3226 | 1-216-095-00 | RES-CHIP | 82K | 5% | 1/10W |
| R3227 | 1-216-091-00 | RES-CHIP | 56K | 5% | 1/10W |
| R3228 | 1-216-085-00 | RES-CHIP | 33K | 5% | 1/10W |
| R3229 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R3230 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R3231 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3232 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3233 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R3234 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R3235 | 1-216-101-00 | RES-CHIP | 150K | 5% | 1/10W |
| R3236 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| R3237 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R3238 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |

**B** **B1**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R3239 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3240 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R3241 | 1-216-093-91 | RES-CHIP | 68K | 5% | 1/10W |
| R3242 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R3243 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3244 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3245 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R3246 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R3247 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R3248 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R3249 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R3251 | 1-216-101-00 | RES-CHIP | 150K | 5% | 1/10W |
| R3252 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W |
| R3253 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R3254 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R3255 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3256 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3257 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R3258 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R3259 | 1-216-061-00 | RES-CHIP | 3.3K | 5% | 1/10W |
| R3262 | 1-216-101-00 | RES-CHIP | 150K | 5% | 1/10W |
| R3263 | 1-216-093-91 | RES-CHIP | 68K | 5% | 1/10W |
| R3267 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R3268 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R3269 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R3271 | 1-216-063-91 | RES-CHIP | 3.9K | 5% | 1/10W |
| R3273 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R3274 | 1-216-063-91 | RES-CHIP | 3.9K | 5% | 1/10W |
| R6201 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R6202 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R6203 | 1-216-295-11 | SHORT | 0 | | |
| R6209 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R6213 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R6214 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R6219 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R6220 | 1-163-009-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| R6245 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R6246 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R6254 | 1-216-021-00 | RES-CHIP | 68 | 5% | 1/10W |
| R6255 | 1-216-308-00 | RES-CHIP | 4.7 | 5% | 1/10W |
| R6258 | 1-216-021-00 | RES-CHIP | 68 | 5% | 1/10W |
| R6259 | 1-216-308-00 | RES-CHIP | 4.7 | 5% | 1/10W |

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* A-1131-652-A B1 BOARD MOUNTED
**********

<CAPACITOR>

| | | | | | |
|---|---|---|---|---|---|
| C1513 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1514 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C1515 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5.00% | 50V |
| C1517 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | | 25V |
| C1518 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C1519 | 1-163-249-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C1520 | 1-163-249-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C1522 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | | 25V |
| C1523 | 1-163-255-11 | CERAMIC CHIP | 150PF | 5.00% | 50V |
| C1524 | 1-163-113-00 | CERAMIC CHIP | 68PF | 5.00% | 50V |
| C1525 | 1-163-249-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C1526 | 1-163-249-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C1528 | 1-164-005-11 | CERAMIC CHIP | 0.47UF | | 25V |
| C1529 | 1-163-255-11 | CERAMIC CHIP | 150PF | 5.00% | 50V |
| C1530 | 1-163-113-00 | CERAMIC CHIP | 68PF | 5.00% | 50V |
| C1543 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C1544 | 1-165-319-11 | CERAMIC CHIP | 0.1UF | | 50V |
| C1554 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |

<CONNECTOR>

| | | |
|---|---|---|
| CN1501* | 1-564-511-11 | PLUG, CONNECTOR 8P |
| CN1502* | 1-564-508-11 | PLUG, CONNECTOR 5P |
| CN1503 | 1-764-811-11 | CONNECTOR, BOARD TO BOARD 10P |

<DIODE>

| | | |
|---|---|---|
| D1501 | 8-719-158-35 | RD9.1S-B |

<IC>

| | | |
|---|---|---|
| IC1502 | 8-759-439-64 | HEF4053BT |

<COIL>

| | | | |
|---|---|---|---|
| L1501 | 1-414-856-11 | INDUCTOR | 10UH |
| L1506 | 1-414-857-11 | INDUCTOR | 100UH |
| L1507 | 1-414-187-11 | INDUCTOR | 47UH |
| L1508 | 1-414-187-11 | INDUCTOR | 47UH |
| L1509 | 1-414-857-11 | INDUCTOR | 100UH |
| L1510 | 1-414-187-11 | INDUCTOR | 47UH |
| L1511 | 1-414-187-11 | INDUCTOR | 47UH |

<TRANSISTOR>

| | | |
|---|---|---|
| Q1501 | 8-729-230-49 | 2SC2712-YG |
| Q1502 | 8-729-216-22 | 2SA1162-G |
| Q1503 | 8-729-230-49 | 2SC2712-YG |
| Q1504 | 8-729-230-49 | 2SC2712-YG |
| Q1505 | 8-729-230-49 | 2SC2712-YG |
| Q1506 | 8-729-230-49 | 2SC2712-YG |
| Q1507 | 8-729-216-22 | 2SA1162-G |
| Q1509 | 8-729-230-49 | 2SC2712-YG |
| Q1510 | 8-729-230-49 | 2SC2712-YG |
| Q1511 | 8-729-216-22 | 2SA1162-G |
| Q1514 | 8-729-230-49 | 2SC2712-YG |
| Q1515 | 8-729-230-49 | 2SC2712-YG |
| Q1516 | 8-729-216-22 | 2SA1162-G |
| Q1520 | 8-729-230-49 | 2SC2712-YG |
| Q1522 | 8-729-230-49 | 2SC2712-YG |
| Q1523 | 8-729-216-22 | 2SA1162-G |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <RESISTOR> | | | |
| R1501 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1502 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1503 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1504 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1506 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1507 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R1508 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R1511 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1512 | 1-216-005-00 | RES-CHIP | 15 | 5% | 1/10W |
| R1515 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1516 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1517 | 1-216-075-00 | RES-CHIP | 12K | 5% | 1/10W |
| R1520 | 1-216-079-00 | RES-CHIP | 18K | 5% | 1/10W |
| R1522 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1523 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1528 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1529 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R1531 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R1537 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1538 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1540 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1541 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1542 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1543 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1545 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1547 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1548 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1549 | 1-216-075-00 | RES-CHIP | 12K | 5% | 1/10W |
| R1551 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R1552 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1553 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1554 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R1556 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1559 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1560 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1561 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1562 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1563 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1566 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1567 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1568 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1569 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |

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| | | |
|---|---|---|
| * | A-1332-110-A | C6 BOARD MOUNTED (EXCEPT KV-XA34M31) |
| * | A-1332-128-A | C6 BOARD MOUNTED (KV-34M31 ONLY) |
| | | ********** |
| | 4-352-844-01 | PIN, LEAD, COATING (EXCEPT KV-XA34M31) |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) |

<CAPACITOR>

| | | | | | |
|---|---|---|---|---|---|
| C701 | 1-162-114-00 | CERAMIC | 0.0047UF | | 2KV |
| C702 | 1-102-074-00 | CERAMIC | 0.001UF | 10.00% | 50V |
| C708 | 1-102-114-00 | CERAMIC | 470PF | 10.00% | 50V |
| C709 | 1-102-114-00 | CERAMIC | 470PF | 10.00% | 50V |
| C710 | 1-102-114-00 | CERAMIC | 470PF | 10.00% | 50V |
| C712 | 1-102-115-00 | CERAMIC | 560PF | 10.00% | 50V |
| C713 | 1-102-112-00 | CERAMIC | 330PF | 10.00% | 50V |
| C714 | 1-102-113-00 | CERAMIC | 390PF | 10.00% | 50V |
| C716 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C717 | 1-107-651-11 | ELECT | 4.7UF | 20.00% | 250V |
| C718 | 1-102-106-00 | CERAMIC | 100PF | 10.00% | 50V |
| C1800 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1803 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1804 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1809 | 1-126-942-61 | ELECT | 1000UF | 20.00% | 25V |
| C1810 | 1-102-106-00 | CERAMIC | 100PF | 10.00% | 50V |

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| | |
|---|---|
| CLP7004-352-844-01 | PIN, LEAD, COATING (KV-XA34M31 ONLY) |
| CLP7014-352-844-01 | PIN, LEAD, COATING (KV-XA34M31 ONLY) |

<CONNECTOR>

| | | |
|---|---|---|
| CN700 | 1-695-915-11 | TAB (CONTACT) |
| CN702 | 1-695-915-11 | TAB (CONTACT) |
| CN703 * | 1-564-509-11 | PLUG, CONNECTOR 6P |
| CN704 | 1-695-915-11 | TAB (CONTACT) |
| CN712 | 1-564-507-11 | PLUG, CONNECTOR 4P |
| CN1801* | 1-564-509-11 | PLUG, CONNECTOR 6P |
| CN1802* | 1-564-506-11 | PLUG, CONNECTOR 3P |

<DIODE>

| | | |
|---|---|---|
| D701 | 8-719-911-19 | 1SS119-25 |
| D702 | 8-719-911-19 | 1SS119-25 |
| D703 | 8-719-911-19 | 1SS119-25 |
| D704 | 8-719-911-19 | 1SS119-25 |
| D705 | 8-719-911-19 | 1SS119-25 |
| D706 | 8-719-911-19 | 1SS119-25 |
| D707 | 8-719-911-19 | 1SS119-25 |
| D708 | 8-719-911-19 | 1SS119-25 |
| D709 | 8-719-911-19 | 1SS119-25 |
| D710 | 8-719-911-19 | 1SS119-25 |
| D711 | 8-719-911-19 | 1SS119-25 |
| D712 | 8-719-911-19 | 1SS119-25 |
| D716 | 8-719-911-19 | 1SS119-25 |
| D717 | 8-719-070-16 | NNCD9.1A-T1 |
| D1803 | 8-719-911-19 | 1SS119-25 |
| D1804 | 8-719-911-19 | 1SS119-25 |
| D1808 | 8-719-908-03 | GP08D |

<IC>

| | | |
|---|---|---|
| IC1800 | 8-759-822-38 | LA6510 |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

# C6 D2 (KV-XA34M31)

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <JACK> | | | |
| J701 | ⚠ 1-540-071-22 | SOCKET, CRT | | | |
| | | <COIL> | | | |
| L701 | 1-410-667-31 | INDUCTOR | 22UH | | |
| L703 | 1-414-186-31 | INDUCTOR | 33UH | | |
| L705 | 1-414-186-31 | INDUCTOR | 33UH | | |
| L707 | 1-414-187-11 | INDUCTOR | 47UH | | |
| | | <TRANSISTOR> | | | |
| Q701 | 8-729-326-11 | 2SC2611 | | | |
| Q702 | 8-729-326-11 | 2SC2611 | | | |
| Q703 | 8-729-326-11 | 2SC2611 | | | |
| Q704 | 8-729-326-11 | 2SC2611 | | | |
| Q705 | 8-729-326-11 | 2SC2611 | | | |
| Q706 | 8-729-326-11 | 2SC2611 | | | |
| Q707 | 8-729-200-17 | 2SA1091-O | | | |
| Q708 | 8-729-200-17 | 2SA1091-O | | | |
| Q709 | 8-729-200-17 | 2SA1091-O | | | |
| Q710 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q711 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q712 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q714 | 8-729-255-12 | 2SC2551-O | | | |
| Q1800 | 8-729-119-76 | 2SA1175-HFE | | | |
| Q1802 | 8-729-119-78 | 2SC2785-HFE | | | |
| | | <RESISTOR> | | | |
| R701 | 1-249-496-11 | CARBON | 100K | 5% | 1/2W |
| R705 | 1-216-392-11 | METAL OXIDE | 1.8 | 5% | 3W |
| R710 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R711 | 1-260-099-11 | CARBON | 1K | 5% | 1/2W |
| R712 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R713 | 1-260-330-11 | CARBON | 1.5K | 5% | 1/2W |
| R714 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R715 | 1-260-330-11 | CARBON | 1.5K | 5% | 1/2W |
| R716 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R717 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R718 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R719 | 1-215-469-00 | METAL | 100K | 1% | 1/4W |
| R720 | 1-249-923-11 | CARBON | 1K | 5% | 1/4W |
| R722 | 1-249-923-11 | CARBON | 1K | 5% | 1/4W |
| R723 | 1-215-469-00 | METAL | 100K | 1% | 1/4W |
| R724 | 1-249-923-11 | CARBON | 1K | 5% | 1/4W |
| R725 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R726 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R727 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R728 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R729 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R730 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R731 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R732 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R733 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R734 | 1-247-739-11 | CARBON | 100 | 5% | 1/2W |
| R738 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R739 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R740 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R747 | 1-215-926-00 | METAL OXIDE | 33K | 5% | 3W |
| R749 | 1-215-927-00 | METAL OXIDE | 47K | 5% | 3W |
| R751 | 1-215-926-00 | METAL OXIDE | 33K | 5% | 3W |
| R753 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R755 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R756 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R757 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R758 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R759 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R760 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R1800 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R1801 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R1802 | 1-249-382-11 | CARBON | 1.2 | 5% | 1/4W |
| R1803 | 1-249-382-11 | CARBON | 1.2 | 5% | 1/4W |
| R1805 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1806 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R1808 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R1809 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R1810 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R1811 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R1812 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R1821 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R1822 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R1823 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R1824 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R1825 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| | | <VARIABLE RESISTOR> | | | |
| RV702 | 1-241-656-11 | RES, ADJ, METAL FILM | 110M | | |
| RV1801 | 1-238-019-11 | RES, ADJ, CARBON 47K | | | |

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* A-1343-979-A D2 BOARD MOUNTED (KV-XA34M31 ONLY)
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<CAPACITOR>

| | | | | | |
|---|---|---|---|---|---|
| C2801 | 1-130-479-00 | MYLAR | 0.0047UF | 5.00% | 50V |
| C2803 | 1-136-357-11 | MYLAR | 680PF | 5.00% | 50V |
| C2805 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C2806 | 1-136-559-11 | MYLAR | 0.0047UF | 10.00% | 400V |
| C2809 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2810 | 1-102-228-00 | CERAMIC | 470PF | 10.00% | 500V |
| C2811 | 1-107-938-11 | ELECT | 0.47UF | 20.00% | 160V |
| C2813 | 1-107-636-11 | ELECT | 10UF | 20.00% | 160V |
| C2814 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2817 | 1-102-244-00 | CERAMIC | 220PF | 10.00% | 500V |
| C2818 | 1-129-928-00 | FILM | 0.0027UF | 5.00% | 630V |
| C2819 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C2820 | 1-107-714-11 | ELECT | 10UF | 20.00% | 16V |
| C2821 | 1-130-469-00 | MYLAR | 680PF | 5.00% | 50V |
| C2822 | 1-106-375-12 | MYLAR | 0.022UF | 10.00% | 250V |
| C2824 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C2825 | 1-130-338-91 | FILM | 0.01UF | 5.00% | 630V |

# D2 (KV-XA34M31)

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C2826 | 1-137-194-81 | FILM | 0.47UF | 5.00% 50V | |
| C2828 | 1-107-714-11 | ELECT | 10UF | 20.00% 16V | |
| C2829 | 1-164-161-11 | CERAMIC CHIP | 0.0022UF | 10.00% 50V | |
| C2830 | 1-130-480-00 | MYLAR | 0.0056UF | 5.00% 50V | |
| C2832 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V | |
| C2833 | 1-137-366-11 | MYLAR | 0.0022UF | 5.00% 50V | |
| C2834 | 1-106-220-00 | MYLAR | 0.1UF | 10.00% 100V | |
| C2835 | 1-216-295-11 | SHORT | 0 | | |
| C2837 | 1-102-129-00 | CERAMIC | 0.01UF | 10.00% 50V | |
| C2840 | 1-137-466-11 | MYLAR | 0.082UF | 5.00% 100V | |
| C2841 | 1-136-177-00 | FILM | 1UF | 5.00% 50V | |
| C2842 | 1-130-477-00 | MYLAR | 0.0033UF | 5.00% 50V | |
| C2843 | 1-107-714-11 | ELECT | 10UF | 20.00% 16V | |
| C2900 | 1-130-480-00 | MYLAR | 0.0056UF | 5.00% 50V | |
| C2901 | 1-126-964-11 | ELECT | 10UF | 20.00% 50V | |
| | | <CONNECTOR> | | | |
| CN2821* | 1-564-506-11 | PLUG, CONNECTOR 3P | | | |
| CN2822* | 1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN2823 | 1-695-915-11 | TAB (CONTACT) | | | |
| | | <DIODE> | | | |
| D2801 | 8-719-073-01 | MA111-(K8).S0 | | | |
| D2803 | 8-719-063-73 | D1NL20U-TR | | | |
| D2804 | 8-719-063-73 | D1NL20U-TR | | | |
| D2806 | 8-719-302-43 | EL1Z | | | |
| D2813 | 8-719-073-01 | MA111-(K8).S0 | | | |
| D2814 | 8-719-210-21 | 11EQS04 | | | |
| D2815 | 8-719-911-19 | 1SS119-25 | | | |
| D2816 | 8-719-911-19 | 1SS119-25 | | | |
| | | <IC> | | | |
| IC2801 | 8-759-700-07 | NJM2903M | | | |
| IC2803 | 8-759-701-59 | NJM78M09FA | | | |
| IC2805 | 8-759-144-72 | UPC358G2-E2 | | | |
| IC2806 | 8-759-700-07 | NJM2903M | | | |
| | | <CHIP CONDUCTOR> | | | |
| JR2006 | 1-216-295-11 | SHORT | 0 | | |
| JR2803 | 1-216-295-11 | SHORT | 0 | | |
| JR2804 | 1-216-295-11 | SHORT | 0 | | |
| JR2805 | 1-216-295-11 | SHORT | 0 | | |
| | | <COIL> | | | |
| L2801 | 1-406-677-11 | INDUCTOR | 10MH | | |
| L2802 | 1-459-111-00 | INDUCTOR | 10MH | | |
| L2803 | 1-414-502-21 | INDUCTOR | 33MH | | |
| L2806 | 1-406-678-11 | INDUCTOR | 15MH | | |
| | | <TRANSISTOR> | | | |
| Q2802 | 8-729-216-22 | 2SA1162-G | | | |
| Q2805 | 8-729-216-22 | 2SA1162-G | | | |
| Q2806 | 8-729-230-49 | 2SC2712-YG | | | |
| Q2807 | 8-729-043-95 | 2SC3840(3) | | | |
| Q2811 | 8-729-931-45 | IRF614 | | | |
| Q2813 | 8-729-230-49 | 2SC2712-YG | | | |
| Q2821 | 8-729-230-49 | 2SC2712-YG | | | |
| Q2822 | 8-729-216-22 | 2SA1162-G | | | |
| Q2823 | 8-729-017-06 | 2SC4793 | | | |
| Q2824 | 8-729-140-97 | 2SB734-34 | | | |
| | | <RESISTOR> | | | |
| R2801 | 1-216-051-00 | RES-CHIP | 1.2K | 5% 1/10W | |
| R2803 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2804 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W | |
| R2806 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2809 | 1-216-073-00 | RES-CHIP | 10K | 5% 1/10W | |
| R2812 | 1-216-097-11 | RES-CHIP | 100K | 5% 1/10W | |
| R2813 | 1-216-089-11 | RES-CHIP | 47K | 5% 1/10W | |
| R2816 | 1-216-097-11 | RES-CHIP | 100K | 5% 1/10W | |
| R2820 | 1-216-089-11 | RES-CHIP | 47K | 5% 1/10W | |
| R2821 | 1-249-412-11 | CARBON | 390 | 5% 1/4W | |
| R2824 | 1-249-393-11 | CARBON | 10 | 5% 1/4W | |
| R2825 | 1-216-037-00 | RES-CHIP | 330 | 5% 1/10W | |
| R2827 | 1-216-041-00 | RES-CHIP | 470 | 5% 1/10W | |
| R2830 | 1-215-899-11 | METAL OXIDE | 15K | 5% 2W | |
| R2831 | 1-215-873-00 | METAL OXIDE | 4.7K | 5% 1W | |
| R2833 | 1-216-460-11 | METAL OXIDE | 3.9K | 5% 2W | |
| R2834 | 1-215-873-00 | METAL OXIDE | 4.7K | 5% 1W | |
| R2837 | 1-216-063-91 | RES-CHIP | 3.9K | 5% 1/10W | |
| R2838 | 1-208-806-11 | METAL CHIP | 10K | 0.5% 1/10W | |
| R2839 | 1-216-081-00 | RES-CHIP | 22K | 5% 1/10W | |
| R2840 | 1-216-097-11 | RES-CHIP | 100K | 5% 1/10W | |
| R2843 | 1-216-097-11 | RES-CHIP | 100K | 5% 1/10W | |
| R2844 | 1-216-097-11 | RES-CHIP | 100K | 5% 1/10W | |
| R2846 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2847 | 1-216-049-11 | RES-CHIP | 1K | 5% 1/10W | |
| R2857 | 1-208-802-11 | METAL CHIP | 6.8K | 0.5% 1/10W | |
| R2858 | 1-216-051-00 | RES-CHIP | 1.2K | 5% 1/10W | |
| R2859 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2860 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2861 | 1-216-107-00 | RES-CHIP | 270K | 5% 1/10W | |
| R2862 | 1-216-107-00 | RES-CHIP | 270K | 5% 1/10W | |
| R2866 | 1-216-073-00 | RES-CHIP | 10K | 5% 1/10W | |
| R2867 | 1-216-689-11 | RES-CHIP | 39K | 5% 1/10W | |
| R2869 | 1-216-113-00 | RES-CHIP | 470K | 5% 1/10W | |
| R2871 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2872 | 1-216-057-00 | RES-CHIP | 2.2K | 5% 1/10W | |
| R2874 | 1-216-085-00 | RES-CHIP | 33K | 5% 1/10W | |
| R2877 | 1-216-421-11 | METAL OXIDE | 12 | 5% 1W | |
| R2878 | 1-216-081-00 | RES-CHIP | 22K | 5% 1/10W | |
| R2879 | 1-216-081-00 | RES-CHIP | 22K | 5% 1/10W | |
| R2880 | 1-216-073-00 | RES-CHIP | 10K | 5% 1/10W | |
| R2882 | 1-216-069-00 | RES-CHIP | 6.8K | 5% 1/10W | |
| R2883 | 1-216-067-00 | RES-CHIP | 5.6K | 5% 1/10W | |
| R2884 | 1-216-067-00 | RES-CHIP | 5.6K | 5% 1/10W | |
| R2885 | 1-216-089-11 | RES-CHIP | 47K | 5% 1/10W | |
| R2886 | 1-216-063-91 | RES-CHIP | 3.9K | 5% 1/10W | |
| R2887 | 1-208-782-11 | METAL CHIP | 1K | 0.5% 1/10W | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

# D2 (KV-XA34M31) D3 (EXCEPT KV-XA34M31) F

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R2888 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2889 | 1-216-101-00 | RES-CHIP | 150K | 5% | 1/10W |
| R2900 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R2901 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R2902 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| | | <SWITCH> | | | |
| S2801 | 1-572-707-11 | SWITCH, LEVER | | | |
| | | <TRANSFORMER> | | | |
| T2801 | 1-424-584-11 | TRANSFORMER, DYNAMIC FOCUS | | | |
| ********** | | | | | |
| * | A-1343-946-A | D3 BOARD MOUNTED (EXCEPT KV-XA34M31) ********** | | | |
| | | <CAPACITOR> | | | |
| C2800 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C2801 | 1-106-220-00 | MYLAR | 0.1UF | 10.00% | 100V |
| C2802 | 1-136-155-00 | FILM | 0.015UF | 5.00% | 50V |
| C2803 | 1-129-723-00 | FILM | 0.056UF | 5.00% | 630V |
| C2805 | 1-104-664-11 | ELECT | 47UF | 20.00% | 25V |
| C2806 | 1-106-383-00 | MYLAR | 0.047UF | 5.00% | 100V |
| C2807 | 1-137-194-81 | FILM | | 0.47UF 5.00% | 50V |
| C2808 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2809 | 1-137-194-81 | FILM | | 0.47UF 5.00% | 50V |
| C2810 | 1-106-375-12 | MYLAR | 0.022UF | 10.00% | 250V |
| C2811 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2812 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2813 | 1-129-708-61 | FILM | 0.0033UF | 5.00% | 630V |
| | | <CONNECTOR> | | | |
| CN2800 * | 1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN2802 * | 1-564-506-11 | PLUG, CONNECTOR 3P | | | |
| CN2803 | 1-695-915-11 | TAB (CONTACT) | | | |
| | | <DIODE> | | | |
| D2800 | 8-719-302-43 | EL1Z | | | |
| D2801 | 8-719-911-19 | 1SS119-25 | | | |
| D2802 | 8-719-911-19 | 1SS119-25 | | | |
| D2803 | 8-719-911-19 | 1SS119-25 | | | |
| | | <IC> | | | |
| IC2800 | 8-759-701-59 | NJM78M09FA | | | |
| IC2801 | 8-759-998-98 | LM358D | | | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <COIL> | | | |
| L2800 | 1-406-989-71 | INDUCTOR | 0UH | | |
| L2802 | 1-406-987-21 | INDUCTOR | 4.7MH | | |
| L2803 | 1-406-986-21 | INDUCTOR | 3.3UH | | |
| L2804 | 1-406-678-11 | INDUCTOR | 15MH | | |
| | | <TRANSISTOR> | | | |
| Q2800 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q2801 | 8-729-195-82 | 2SC2958 | | | |
| Q2802 | 8-729-017-06 | 2SC4793 | | | |
| Q2803 | 8-729-216-22 | 2SA1162-G | | | |
| Q2804 | 8-729-230-49 | 2SC2712-YG | | | |
| | | <RESISTOR> | | | |
| R2800 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R2802 | 1-260-111-11 | CARBON | 10K | 5% | 1/2W |
| R2803 | 1-260-111-11 | CARBON | 10K | 5% | 1/2W |
| R2804 | 1-216-061-00 | RES-CHIP | 3.3K | 5% | 1/10W |
| R2805 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R2806 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R2807 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W |
| R2808 | 1-215-857-11 | METAL OXIDE | 10 | 5% | 1W |
| R2809 | 1-216-059-00 | RES-CHIP | 2.7K | 5% | 1/10W |
| R2810 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2811 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R2812 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R2813 | 1-216-059-00 | RES-CHIP | 2.7K | 5% | 1/10W |
| R2814 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R2815 | 1-216-085-00 | RES-CHIP | 33K | 5% | 1/10W |
| R2816 | 1-216-107-00 | RES-CHIP | 270K | 5% | 1/10W |
| R2817 | 1-216-107-00 | RES-CHIP | 270K | 5% | 1/10W |
| | | <TRANSFORMER> | | | |
| T2800 | 1-413-059-00 | TRANSFORMER, FERRITE (DFT) | | | |
| ********** | | | | | |
| * | A-1241-443-A | F BOARD MOUNTED ********** | | | |
| | 1-533-223-11 | CLIP, FUSE | | | |
| * | 4-374-846-01 | COVER, CAPACITOR, CAP TYPE | | | |
| | | <CAPACITOR> | | | |
| C654 ⚠ | 1-117-703-11 | CERAMIC | 0.0047UF | 99% | 250V |
| C4601 ⚠ | 1-104-708-11 | MYLAR | 0.47UF | 20.00% | 250V |
| C4602 ⚠ | 1-109-835-11 | MYLAR | 0.68UF | 20.00% | 250V |
| | | <CONNECTOR> | | | |
| CN4601 * | 1-580-843-11 | PIN, CONNECTOR (POWER) | | | |
| CN4602 * | 1-580-843-11 | PIN, CONNECTOR (POWER) | | | |
| CN4603 | 1-695-915-11 | TAB (CONTACT) | | | |

F H

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <FUSE> | | | |
| F4601 ⚠ | 1-532-299-00 | FUSE, TIME-LAG 5A/250V | | | |
| | | <RESISTOR> | | | |
| R4601 ⚠ | 1-202-719-00 | SOLID | 1M | 10% 1/2W | |
| | | <TRANSFORMER> | | | |
| T4601 ⚠ | 1-429-707-12 | TRANSFORMER, LINE FILTER | | | |
| T4602 ⚠ | 1-431-182-11 | TRANSFORMER, LINE FILTER | | | |
| | | <VARISTOR> | | | |
| VDR461 | 1-803-830-11 | VARISTOR (ERZV14D621) | | | |
| ********** | | | | | |
| * | A-1372-887-A | H BOARD MOUNTED ********** | | | |
| * | 4-055-304-01 | HOLDER, LED | | | |
| | | <CAPACITOR> | | | |
| C3900 | 1-136-153-00 | FILM | | 0.01UF 5.00%50V | |
| C3902 | 1-136-153-00 | FILM | | 0.01UF 5.00%50V | |
| C3904 | 1-104-664-11 | ELECT | 47UF | 20.00% 25V | |
| C3905 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V | |
| C3906 | 1-126-963-11 | ELECT | 4.7UF | 20.00% 50V | |
| C3910 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V | |
| C3911 | 1-104-664-11 | ELECT | 47UF | 20.00% 16V | |
| C3912 | 1-102-114-00 | CERAMIC | 470PF | 10.00% 50V | |
| C3913 | 1-126-960-11 | ELECT | 1UF | 20.00% 50V | |
| | | <CONNECTOR> | | | |
| CN3601 * | 1-580-844-11 | PIN, CONNECTOR (POWER) | | | |
| CN3602 * | 1-580-844-11 | PIN, CONNECTOR (POWER) | | | |
| CN3901 * | 1-564-507-11 | PLUG, CONNECTOR 4P | | | |
| CN3902 | 1-564-509-11 | PLUG, CONNECTOR 6P | | | |
| CN3904 * | 1-564-512-11 | PLUG, CONNECTOR 9P | | | |
| CN3905 * | 1-564-512-11 | PLUG, CONNECTOR 9P | | | |
| | | <DIODE> | | | |
| D3900 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D3901 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D3905 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D3906 | 8-719-045-19 | SPB-26MVWF | | | |
| D3907 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D3908 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| | | <IC> | | | |
| IC3901 | 8-742-205-30 | SBX3081-01(30) | | | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <JACK> | | | |
| J3901 | 1-750-264-11 | JACK | | | |
| J3902 | 1-784-646-11 | TERMINAL, S | | | |
| J3903 | 1-770-329-11 | JACK, PIN 3P | | | |
| | | <COIL> | | | |
| L3901 | 1-414-183-41 | INDUCTOR | 10UH | | |
| L3902 | 1-414-183-41 | INDUCTOR | 10UH | | |
| | | <TRANSISTOR> | | | |
| Q3901 | 8-729-030-02 | DTC144ESA | | | |
| Q3902 | 8-729-030-02 | DTC144ESA | | | |
| | | <RESISTOR> | | | |
| R3900 | 1-249-411-11 | CARBON | 330 | 5% 1/4W | |
| R3901 | 1-249-411-11 | CARBON | 330 | 5% 1/4W | |
| R3902 | 1-247-804-11 | CARBON | 75 | 5% 1/4W | |
| R3904 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R3905 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R3907 | 1-249-426-11 | CARBON | 5.6K | 5% 1/4W | |
| R3908 | 1-249-413-11 | CARBON | 470 | 5% 1/4W | |
| R3909 | 1-249-417-11 | CARBON | 1K | 5% 1/4W | |
| R3910 | 1-249-420-11 | CARBON | 1.8K | 5% 1/4W | |
| R3911 | 1-249-411-11 | CARBON | 330 | 5% 1/4W | |
| R3912 | 1-247-843-11 | CARBON | 3.3K | 5% 1/4W | |
| R3913 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R3914 | 1-249-411-11 | CARBON | 330 | 5% 1/4W | |
| R3915 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R3916 | 1-249-401-11 | CARBON | 47 | 5% 1/4W | |
| R3917 | 1-247-804-11 | CARBON | 75 | 5% 1/4W | |
| R3918 | 1-249-409-11 | CARBON | 220 | 5% 1/4W | |
| R3919 | 1-249-409-11 | CARBON | 220 | 5% 1/4W | |
| R3920 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R3921 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R3922 | 1-249-421-11 | CARBON | 2.2K | 5% 1/4W | |
| | | <SWITCH> | | | |
| S3601 ⚠ | 1-571-433-21 | SWITCH, PUSH (AC POWER) | | | |
| S3902 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S3903 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S3904 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S3905 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S3906 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S3907 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S3908 | 1-692-431-21 | SWITCH, TACTILE | | | |
| ********** | | | | | |

**J** **VM1**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| * | A-1388-288-A | J BOARD MOUNTED | | | |
| | | ********** | | | |
| | | <CAPACITOR> | | | |
| C2410 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C2411 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C2412 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C2413 | 1-102-112-00 | CERAMIC | 330PF | 10.00% | 50V |
| C2414 | 1-102-112-00 | CERAMIC | 330PF | 10.00% | 50V |
| C2418 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C2419 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| | | <CONNECTOR> | | | |
| CN2410 * | 1-564-523-11 | PLUG, CONNECTOR 8P | | | |
| | | <DIODE> | | | |
| D2410 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D2411 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D2412 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D2414 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D2415 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| | | <JACK> | | | |
| J2410 | 1-784-623-11 | BLOCK, PIN JACK 5P | | | |
| | | <RESISTOR> | | | |
| R2410 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W |
| R2411 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W |
| R2412 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W |
| R2414 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R2415 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R2417 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R2418 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R2419 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R2420 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R2421 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |

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| | | | | | |
|---|---|---|---|---|---|
| * | A-1342-580-A | VM1 BOARD MOUNTED | | | |
| | | ********** | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | | <CAPACITOR> | | | |
| C5900 | 1-102-115-00 | CERAMIC | 560PF | 10.00% | 50V |
| C5902 | 1-104-661-91 | ELECT | 330UF | 20.00% | 16V |
| C5903 | 1-161-830-00 | CERAMIC | 0.0047UF | | 500V |
| C5905 | 1-126-925-11 | ELECT | 470UF | 20.00% | 10V |
| C5906 | 1-130-491-00 | MYLAR | 0.047UF | 5.00% | 50V |
| C5907 | 1-107-638-11 | ELECT | 33UF | 20.00% | 160V |
| C5908 | 1-106-383-00 | MYLAR | 0.047UF | 10.00% | 200V |
| C5909 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C5910 | 1-130-471-00 | MYLAR | 0.001UF | 5.00% | 50V |
| C5911 | 1-107-949-11 | ELECT | 2.2UF | 20.00% | 160V |
| C5912 | 1-104-999-11 | MYLAR | 0.1UF | 10.00% | 200V |
| C5913 | 1-130-471-00 | MYLAR | 0.001UF | 5.00% | 50V |
| C5914 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C5916 | 1-130-491-00 | MYLAR | 0.047UF | 5.00% | 50V |
| C5917 | 1-126-925-11 | ELECT | 470UF | 20.00% | 10V |
| C5918 | 1-102-244-00 | CERAMIC | 220PF | 10.00% | 500V |
| C5919 | 1-136-165-00 | FILM | 0.1UF | 5.00% | 50V |
| | | <CONNECTOR> | | | |
| CN2801 * | 1-564-506-11 | PLUG, CONNECTOR 3P | | | |
| CN5901 * | 1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN5904 * | 1-770-723-11 | CONNECTOR, BOARD TO BOARD 8P | | | |
| | | <DIODE> | | | |
| D5901 | 8-719-911-19 | 1SS119-25 | | | |
| D5902 | 8-719-110-88 | RD39ES-B2 | | | |
| D5903 | 8-719-911-19 | 1SS119-25 | | | |
| D5904 | 8-719-110-88 | RD39ES-B2 | | | |
| D5905 | 8-719-911-19 | 1SS119-25 | | | |
| D5906 | 1-249-406-11 | CARBON | 120 | 5% | 1/4W |
| D5907 | 1-249-406-11 | CARBON | 120 | 5% | 1/4W |
| | | <COIL> | | | |
| L5901 | 1-414-187-11 | INDUCTOR | 47UH | | |
| | | <TRANSISTOR> | | | |
| Q5901 | 8-729-230-45 | 2SC2458-YGR | | | |
| Q5902 | 8-729-809-26 | 2SA1606-E | | | |
| Q5903 | 8-729-230-45 | 2SC2458-YGR | | | |
| Q5904 | 8-729-119-76 | 2SA1175-HFE | | | |
| Q5905 | 8-729-230-45 | 2SC2458-YGR | | | |
| Q5906 | 8-729-809-29 | 2SC4159-E | | | |
| Q5907 | 8-729-230-45 | 2SC2458-YGR | | | |
| | | <RESISTOR> | | | |
| R5901 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R5902 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R5903 | 1-247-734-11 | CARBON | 39 | 5% | 1/2W |
| R5904 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R5905 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R5906 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R5907 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R5908 | 1-249-383-11 | CARBON | 1.5 | 5% | 1/4W |
| R5909 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R5910 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R5911 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R5912 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R5914 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R5915 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R5916 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |

# VM1 V1 (EXCEPT KV-XA29M50)

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R5917 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R5918 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R5919 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R5920 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R5921 | 1-216-476-11 | METAL OXIDE | 180 | 5% | 3W |
| R5922 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R5923 | 1-249-383-11 | CARBON | 1.5 | 5% | 1/4W |
| R5925 | 1-249-400-11 | CARBON | 39 | 5% | 1/4W |
| R5927 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R5929 | 1-215-880-00 | METAL OXIDE | 10 | 5% | 2W |

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* A-1347-164-A V1 BOARD COMPLETE (EXCEPT KV-XA29M50)
**********

<CAPACITOR>

| | | | | | |
|---|---|---|---|---|---|
| C801 | 1-104-664-11 | ELECT | 47UF | 20.00% | 16V |
| C805 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C806 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C814 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C815 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C816 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C817 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C818 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5.00% | 50V |
| C820 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5.00% | 50V |
| C821 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C822 | 1-163-009-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C823 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C826 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C829 | 1-163-113-00 | CERAMIC CHIP | 68PF | 5.00% | 50V |
| C830 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C831 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C832 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C835 | 1-163-038-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C837 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |

<CONNECTOR>

| | | | |
|---|---|---|---|
| CN801 | * 1-774-812-11 | CONNECTOR, BOARD TO BOARD 7P | |
| CN803 | * 1-774-812-11 | CONNECTOR, BOARD TO BOARD 7P | |

<DIODE>

| | | | |
|---|---|---|---|
| D802 | 8-719-914-44 | DAP202K | |
| D803 | 8-719-105-46 | RD3.3M-B2 | |
| D804 | 8-719-105-91 | RD5.6M-B2 | |

<FERRITE BEAD>

| | | | |
|---|---|---|---|
| FB801 | 1-410-397-21 | FERRITE | 1.1UH |
| FB802 | 1-410-397-21 | FERRITE | 1.1UH |
| FB803 | 1-410-397-21 | FERRITE | 1.1UH |
| FB804 | 1-410-682-31 | INDUCTOR | 470UH |
| FB805 | 1-410-397-21 | FERRITE | 1.1UH |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <IC> | | | |
| IC801 | 8-759-476-87 | SAA5261 | | | |
| | | <CHIP CONDUCTOR> | | | |
| JR800 | 1-216-295-11 | SHORT | 0 | | |
| JR801 | 1-216-295-11 | SHORT | 0 | | |
| JR802 | 1-216-295-11 | SHORT | 0 | | |
| JR804 | 1-216-295-11 | SHORT | 0 | | |
| JR805 | 1-216-295-11 | SHORT | 0 | | |
| | | <TRANSISTOR> | | | |
| Q801 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q803 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q805 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q806 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q807 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q808 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q810 | 8-729-120-28 | 2SC1623-L5L6 | | | |
| Q811 | 8-729-019-01 | 2SD2394-EF | | | |
| Q817 | 8-729-900-53 | DTC114EK | | | |
| | | <RESISTOR> | | | |
| R800 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R801 | 1-216-295-11 | SHORT | 0 | | |
| R802 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R803 | 1-216-295-11 | SHORT | 0 | | |
| R804 | 1-216-295-11 | SHORT | 0 | | |
| R805 | 1-216-295-11 | SHORT | 0 | | |
| R807 | 1-216-295-11 | SHORT | 0 | | |
| R813 | 1-216-295-11 | SHORT | 0 | | |
| R820 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R821 | 1-216-083-00 | RES-CHIP | 27K | 5% | 1/10W |
| R822 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R824 | 1-216-295-11 | SHORT | 0 | | |
| R825 | 1-216-295-11 | SHORT | 0 | | |
| R827 | 1-216-295-11 | SHORT | 0 | | |
| R828 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R829 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R830 | 1-216-295-11 | SHORT | 0 | | |
| R831 | 1-216-295-11 | SHORT | 0 | | |
| R832 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R835 | 1-216-295-11 | SHORT | 0 | | |
| R839 | 1-216-655-11 | METAL CHIP | 1.5K | 0.5% | 1/10W |
| R841 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R842 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R843 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R844 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R845 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R846 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R847 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R848 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R849 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R850 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W |
| R851 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

# V1 (EXCEPT KV-XA29M50)

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R853 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W |
| R857 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W |
| R861 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R862 | 1-260-095-11 | CARBON | 470 | 5% | 1/2W |
| R863 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R864 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R866 | 1-215-880-00 | METAL OXIDE | 10 | 5% | 2W |
| R871 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R879 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R880 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R882 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R884 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| | | <CRYSTAL> | | | |
| X801 | 1-578-774-11 | VIBRATOR, CRYSTAL | | | |

**********

MISCELLANEOUS
**********

| | | |
|---|---|---|
| ⚠ | 1-419-293-11 | COIL, DEGAUSSING (KV-XA34M31) |
| ⚠ | 1-419-323-11 | COIL, DEGAUSSING (EXCEPT KV-XA34M31) |
| | 1-452-094-00 | CIRCULAR DISC MAGNET B |
| | 1-452-032-00 | MAGNET,DISC |
| | 1-452-896-61 | COIL, NA ROTATION (RT-200) |
| | 1-529-190-11 | SPEAKER (5CM) |
| | 1-529-563-11 | SPEAKER (15X6.5CM) |
| ⚠ | 1-574-062-11 | CORD, POWER (WITH CONNECTOR) 2.5A/250V |
| | | (KV-XA29M50/XA29M61) |
| ⚠ | 1-574-358-11 | CORD, POWER (WITH CONNECTOR) 7.5A/250V |
| | | (KV-XA29M31/XA34M31) |
| ⚠ | 1-467-525-31 | CAP BLOCK, HIGH-VOLTAGE |
| | | (KV-XA34M31 ONLY) |
| | 1-202-818-00 | RES, SOLID 1.0K |
| ⚠ | 8-451-494-31 | DEFLECTION YOKE (Y29RSA-S) |
| | | (KV-XA29M31/KV-XA29M50/XA29M61) |
| ⚠ | 8-451-499-21 | DEFLECTION YOKE (Y34RSA-X)(KV-XA34M31) |
| ⚠ | 8-735-056-05 | PICTURE TUBE (M68LNH070X) |
| | | (KV-XA29M50/XA29M61) |
| ⚠ | 8-735-057-05 | PICTURE TUBE (M68LNH070X)(KV-XA29M31) |
| ⚠ | 8-735-062-05 | PICTURE TUBE (A80LPD10X)(KV-XA34M61) |
| | 8-453-007-31 | NA324-M3 (KV-XA34M31) |
| | 8-453-011-11 | NA299-M (EXCEPT KV-XA34M31) |

**********

ACCESSORIES AND PACKING MATERIALS
**********
(EXCEPT KV-XA34M31)

| | | |
|---|---|---|
| | 3-701-910-00 | SCREW, SPECIAL (DIA. 3.8 x20) |
| * | 4-029-168-01 | BAG, PROTECTION |
| | 4-065-210-01 | JOINT |
| * | 4-078-945-01 | CUSHION (LOWER) (ASSY) |
| * | 4-078-948-01 | CUSHION (UPPER) (ASSY) |
| | 4-078-793-21 | MANUAL, INSTRUCTION (KV-XA29M31) |
| | 4-078-793-31 | MANUAL, INSTRUCTION (KV-XA29M50/XA29M61) |
| * | 4-078-951-01 | INDIVIDUAL CARTON |
| * | 4-079-400-01 | TRAY |
| | 4-392-003-11 | BAND, HOLD |
| | 4-392-004-11 | CLIP |

**********

ACCESSORIES AND PACKING MATERIALS (KV-XA34M31)
**********

| | | |
|---|---|---|
| | 4-065-210-01 | JOINT |
| * | 4-074-148-01 | BAG, PROTECTION |
| * | 4-079-605-01 | CARTON |
| * | 4-079-606-01 | TRAY |
| * | 4-079-607-01 | CUSHION (LOWER)(ASSY) |
| * | 4-079-610-01 | CUSHION (UPPER)(ASSY) |
| | 4-078-793-21 | MANUAL, INSTRUCTION |
| | 4-392-003-11 | BAND, HOLD |
| | 3-701-910-00 | SCREW, SPECIAL (DIA. 3.8X20) |
| | 4-392-004-11 | CLIP |

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REMOTE COMMANDER
**********

| | | |
|---|---|---|
| | 1-418-038-11 | REMOTE COMMANDER (RM-954) |
| | 9-933-895-01 | BATTERY, COVER REMOTE COMMANDER (RM-954) |

9-872-219-01

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Visual Entertainment General Area

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